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THE IMPACT OF SELF-BELIEF AND STUDENT BEHAVIOURS ON THE ACHIEVEMENT OF TARGET GRADES IN SIXTH-FORM: A CASE STUDY

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Abstract

Within Further Education, assigning target grades to students at the outset of their programme of study is a prevalent practice which is assumed to be motivational. However, there has been little research about students' experiences of this practice, and how it influences academic attitudes and behaviour. In response to this perceived gap, a case study design was undertaken in a sixth-form college to explore student experiences. This comprised four stages of data collection, the first of which involved students completing two questionnaires on self-efficacy and locus of control. Twelve students were then purposively selected, based on the lowest and highest questionnaire scores. The next stage entailed interviewing the twelve students in order to gain in-depth understanding of their experience. In stages three and four, data were collected on student attendance and grades for formative and summative assessment across the academic year.

Thematic analysis of data revealed that not all students accepted their target grades, but this did not necessarily impact detrimentally on final outcomes. This was particularly apparent for students who shared an internal locus of control. Students with low levels of self-efficacy were also found to exhibit particular behaviours such as procrastination; similarly this also did not necessarily impact on outcomes. However, being assigned a target in conjunction with low self-efficacy and an external locus of control did seem to result in a negative experience.

Overall, the assumption that target grades are motivational has not been fully substantiated in this research. To promote the effectiveness of a college wide target setting policy, students need to own their own targets; however, this ownership may be influenced by their self-efficacy or locus of control beliefs. In addition, existing literature has not, to date, substantively explored target setting, self-efficacy and a locus of control and this is an area for future research.

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To my mum and auntie who made this possible. I dedicate this thesis to you.

To my dad who said that me gaining this qualification would make him the proudest dad in the world.

To Yvie and Ralph. Never forget anything is possible. Just believe in yourselves and mum will always support you in anything you do.

And finally, to my inspirational supervisors, Professor Judith Lathlean and Dr Amelia Hempel-Jorgensen who I was privileged to have supporting me through this experience.

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Acronyms

A level	Advanced level
Alps	A-level Performance System
AS level	Advanced Subsidiary level
BTEC	Business and Technology Education Council
BERA	British Education Research Association
CSV	Comma-separated values (file format)
CREET	Centre for Research in Education and Educational Technology
DfEE	Department for Employment and Education
Eilp	Electronic Individual Learning Plan
FE	Further Education
FP	Feedback about processing
FR	Feedback about regulation
FS	Feedback about self
FSM	Free school meals
FT	Feedback about task
GCSE	General Certificate of Secondary Education
GNVQ	General National Vocational Qualification
GPA	Grade Point Average
HE	Higher Education
HREC	Human Research Ethics Committees
IAEPM	International Assessment of Educational Progress in Mathematics
LoC	Locus of Control

MIS	Management Information System
MP	Motivation at process level
MR	Motivation at regulation level
MS	Motivation at self level
MSLQ	Motivated Strategies for Learning Questionnaire
MT	Motivation at task level
NFER	National Foundation for Educational Research
NPISH	Not for Profit Institutions Serving Households
OECD	Organisation for Economic Co-operation and Development
OFSTED	Office for Standards in Education
OU	Open University
PGCE	Post Graduate Certificate in Higher Education
PISA	Programme for International Student Assessment
STAR	Student Tracking and Achievement Record
U	Ungraded
UK	United Kingdom
US	United States

Chapter 1 Introduction and background

This thesis focuses on understanding the experience of students in relation to their self-belief and how it impacts upon studentship attitudes and behaviours to achieve target grades, and ultimately academic outcomes. Many education institutions engage in the practice of setting individual targets which are the anticipated final grades in relation to the qualification that their pupils (pre 16) and students (post 16) are working towards. These grades are communicated to pupils and students and are regularly monitored. This study aims to understand the students' experience of a target setting process within the context of a sixth form college in Wales. The college is small in comparison to other colleges and educates primarily 16-19 year olds. It is also a Catholic college which has an equitable all-student approach to pastoral care. Part of the college's mission is to ensure all students realise their full potential in an atmosphere of love, service and respect, and one of the strategies the college employs to achieve this is through a target setting policy. All students within the college are expected to engage in this target setting policy and the rationale for this policy is based on the perception that targets are always motivational and, consequently, will facilitate students in achieving their potential.

This first chapter provides a brief background to the UK wide target setting policy within the field of education, which was introduced from 1994 as an attempt to raise standards. In 1997, however, Wales became devolved but continued its commitment to a target setting policy. Nevertheless, more recently its approach has differed to the UK stance which will be discussed. This is followed by an explanation of the policy and practice currently undertaken by the sixth form college that features in this research, including a definition of key terms. My own background and rationale for the study is outlined, along with the research questions this research has addressed. Finally, an overview of the thesis is provided.

1.1 Historical background to UK target setting policy

References to target setting as a means to secure improvement within the field of education were largely absent from government discourse and OFSTED publications prior to 1994 (OFSTED 1993/4).

However, the year 1994 saw New Labour's commitment to improve public services including education, transport and health. In its 1994 policy statement on education 'Opening doors to a learning society' (Labour Party 1994), the term 'target' was stated 15 times. For example:

We will set targets to improve our performance, increase the numbers of young people in education and training and improve their achievements (p23).

Indeed, the 1990s saw radical policy initiatives related to judging school performance as seen by the introduction of a national curriculum, statutory testing and the publication of league tables and cyclical inspections. Moreover, a target setting approach was established across all public services, where targets were defined and inspectorial bodies were established to assess the progress being made to achieve these targets. These bodies were also to publish transparent findings in the pursuit of demonstrating to the public that their taxpayers' money was being well spent. This approach can further be seen as a result of the increased pressure that England was experiencing from international comparisons (Galton 1998). For example, in the Second International Assessment of Educational Progress in Mathematics (IAEPM II 1991), England was ranked only 11th out of the 18 countries who had elected to participate. The top performing countries were largely Pacific Rim (for example, China, Hong Kong and Singapore) although Switzerland, as a European counterpart, occupied 4th place.

Continuing with this target setting commitment, in 1998, Michael Barber, the then Head of the Standards and Effectiveness Unit, announced that statutory target setting would be introduced in the UK's schools at Key Stage 2 (DfEE 1998). He stated that the setting of specific targets at least once a year for pupil performance would provide a powerful lever for raising standards in schools. Now twenty years on from this initial commitment, the language of performance management and target setting appears to have evolved substantially, which has shaped both political discourse about educational standards and professional discourse about educational practice. Indeed, currently the words 'raising standards' appear synonymous with the notion of setting targets and working towards an ever-increasing number of targets (Kerry 2002; Cambridge Assessment 2013). This evolved language, commitment and prevalence can also be seen in Estyn's Guidance for the Inspection of Further Education from September 2010 - Updated September 2016 (Estyn 2016), for example, where the setting of targets is mentioned 20 times.

Inspectors should evaluate whether pupils regularly review their own learning, understand their progress and are involved in setting their learning targets (p26).

1.2 The College's policy and practice

The college that features in this research has a specific policy relating to target setting which is also founded on the pursuit to raise standards. The policy begins by stating that:

Target setting is a significant strategy in the College for improving the achievement of students. It will only be effective if the learner is at the heart of the process. The targets that are set should be challenging, but realistic, and take into account every student's starting point of learning (p3).

The aim of the target setting policy is stated as:

- *to challenge students to reach their full potential, always striving to improve their performance (p3).*

However, the target setting policy is also used to improve the college's overall performance, where it is also stated that:

- *to challenge course teams to set and monitor targets related to attainment and retention*
- *to enable the college to set college-wide targets that are based upon targets set at an individual student level (p3).*

In practice, this policy states that, at beginning of the academic year, each student will be given a target grade for each subject that they are studying at the college. These grades are calculated by an external organisation called 'Alps'. Alps (<http://alps.education>) is a private organisation that has developed analytical tools to enable students to achieve their maximum potential. The organisation was founded by Dr Kevin Conway CBE following his retirement as Principal from Greenhead College, Huddersfield in 2001. Alps is based on three underlying principles:

1. Everyone is individual and should be valued;
2. Aspiration, inspiration and motivation are vital when you are working with young people;
3. Good schools are defined by three elements: powerful leadership, high quality teaching and high quality target setting, monitoring, guidance and support.

Their website states that:

We're committed to putting students at the centre of all our endeavours. We believe the way to do this is to set demanding but achievable targets for both staff and students. We also believe in challenging everyone to be aspirational, holding poor performance to account, whilst giving teachers effective tools and support to help their students achieve as much as possible.

Alps generates minimum expected grades based on every student's unique GCSE profile. These are considered to be realistic, but aspirational, and wholly based on ability and not a student's background. Alps uses the previous year's results, which is a national dataset provided by the UK's Awarding Bodies, and predicts what a student should achieve with the same GCSE results and for the same subjects. However, in order for the target grades to be aspirational, Alps ranks the distribution set and generate targets based on the top quartile. Their website claims that:

Setting them [targets] at the equivalent of the top 25% is aspirational but achievable and is proven to drive up outcomes for students.

Their promotional literature provides many case studies of how Alps has been used to increase student outcomes, sustain high achievement and develop school improvement strategies, for example. Clearly, as a profit making organisation, all literature is highly positive about their effectiveness in supporting the underlying principles as stated above.

In using the Alps system, the college purchases these analytical tools on an annual basis. These tools provide a minimum expected grade (also called target grade) for every student and for every subject the student is studying. The college then gives students guidance regarding the self-regularity process which they are expected to follow. This process involves expecting them to compare their target grade to their achievement grade for every piece of formative work set. Where there is a negative variance, students are required to plan what they need to do to improve and this may involve setting action points or resubmitting work following amendments.

The effectiveness of this process is reviewed at both student level, course level and college level. At student level, students can compare their target grade to the actual grade they achieved and will be able to ascertain personally whether they have over or underperformed. After results day in August, Alps publish detailed reports for centres which illustrate every course's performance in relation to the differential between the actual grades achieved and target grades assigned, which are illustrated on thermometer style diagrams as shown in Figure 1. This thermometer allocates a

point score and a colour band to each course, as well as at an overall qualification level (AS, A2 and BTEC). If a course or an overall qualification achieves a red point score of one, two or three, this means that a cohort of students has overachieved against their target grade; a black grading of four, five or six means that a cohort of students has largely met their target grades. However, this is based on an aggregate, so some students may have overachieved which has compensated for those that have underachieved. The bottom blue section of the thermometer indicates that students have generally not achieved their target grade and a subject or a qualification type would be subject to quality improvement measures. Hence, courses are also held accountable for students not achieving their target grades.

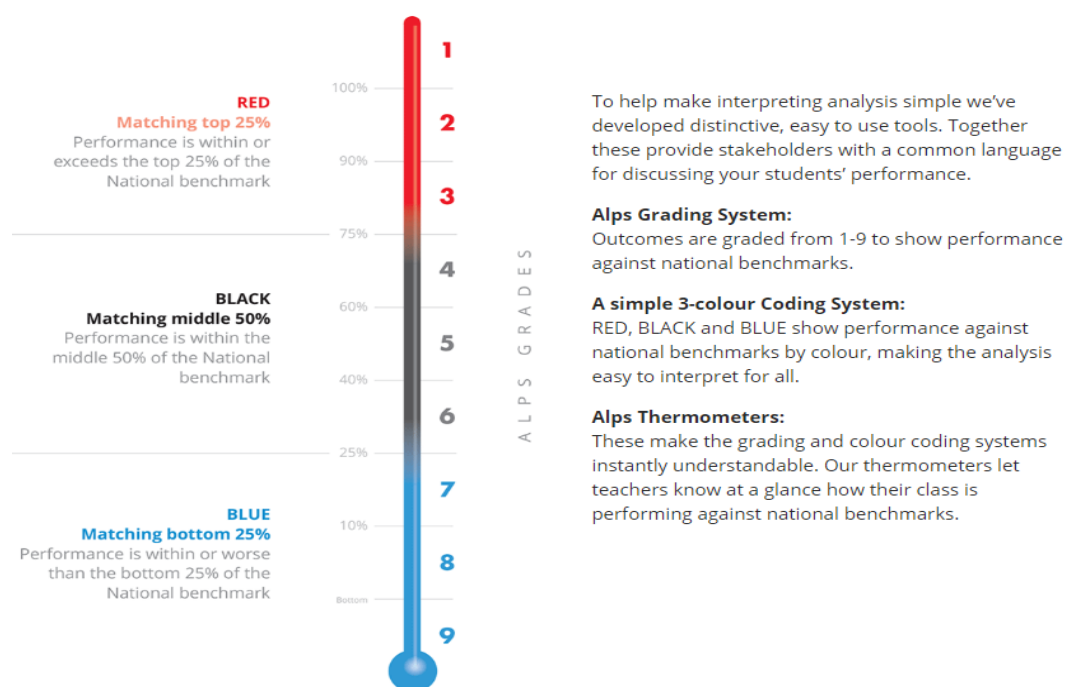


Figure 1: An example of an Alps thermometer

1.3 Rationale for the research study

The Welsh Government and The Welsh Inspectorate for Education and Training (Estyn) require students to have individual targets and, as discussed above, educational institutions are able to pay private organisations (such as Alps) to calculate targets for students based on the GCSE profile they enter the college with and the subjects they intended to study. As an Assistant Principal with

responsibility for Quality Improvement, I was leading this process in procuring individual targets and then implementing a system that involved students regularly monitoring the grades that they received for their homework, tests and coursework with these externally generated target grades. If every student achieved their target grades, this would ultimately enable the organisation to achieve college-wide quantitative targets since such college-wide targets were based on an aggregation of individual targets. I was then holding courses accountable if they achieved a blue or a lower black score and courses would be required to embark on a quality improvement programme in order to address this perceived underperformance. At a college level, I was also reporting on Alps scores for individual courses (where there was significant under or over performance) and the overall qualification level in the college's annual Self-Evaluation which was a lengthy document that was reported to Governors, the Welsh Government and forms the starting point for an Estyn inspection.

As discussed in section 1.1, the use of targets to judge a college's performance in conjunction with the use of a target to challenge students to reach their full potential troubled me. On the one hand a tool was being used that depersonalized as it is only the aggregate that is in focus, but on the other hand, it sought to focus on students at an individual level. To some extent this concern is being addressed. The Welsh Government published a document in October 2019 'School target-setting regulations: statutory requirements and changes' which stated:

*In 2017 the Welsh Government consulted on, and subsequently amended in 2018, a series of regulations to stop the routine publication of Teacher Assessment data and National Reading and Numeracy Tests data at a school, local authority and regional level, including the regulations on school target setting requirements. This collection of changes was to help ensure that schools could focus on assessment of the pupil, rather than using data as part of a **high stakes accountability system** (p2).*

Whilst mechanisms to judge performance are clearly essential in any educational organisation's self-evaluation in their pursuit to raise standards, in the same document, the Welsh Government stated:

Target setting should stem from rigorous monitoring and evaluation of a wide range of information and the work of the school as a whole, in order to identify strengths and priorities for improvement, predict potential performance and focus effort and resources on raising outcomes for pupils (p4).

Therefore, the traditional approach that involves the simple aggregation of individual student targets to institution wide targets seems to be diminishing and there now appears to be more of a recognition that schools focus on students, as opposed to data.

My preliminary reading introduced the concepts relating to self-belief that particularly resonated with me. I had often considered the impact of being assigned a target grade and the subsequent achievement or non-achievement of the target grade on students' self-belief. This reinforced my desire to research this topic so that I could understand and attribute meaning to the experiences of students. These constructs were Rotter's locus of control (LoC), which is conceived as a belief that a response will, or will not, influence the attainment or reinforcement of any particular outcome in one's life (Rotter 1966) and Bandura's (1977) notion of self-efficacy. This denotes a person's belief about their capabilities to produce performances that influence events which will then affect their life. Bandura stated: *'In order to have beliefs about what one can accomplish, one must have beliefs about whether they can accomplish it* (p434). Therefore, this thesis focuses on attempting to understand students' self-belief and how this impacts upon studentship attitudes and behaviours to achieve target grades, through addressing the research questions stated in Section 1.6 below.

1.4 Key definitions

The **Further Education** sector in Wales comprises 13 colleges and Adult Learning Wales (the largest Adult Community Learning provider). Further Education (FE) colleges in Wales are independent not-for-profit institutions, or what are commonly referred to as NPISH bodies (Not for Profit Institutions Serving Households) within communities. Colleges receive a proportion of their funding from the Welsh Government and other income from their work with businesses, contracted services and international activity. As such, they form part of the public service in Wales. Most of the Further Education colleges in Wales may be described as **part-tertiary**, that is, where one or more campuses deliver vocational education and training, in addition to delivering **general education** for the local area's sixth form cohort. However, the FE college in which this case study is based specialises in general education comprising of largely A and AS level delivery to **sixth form students**. Sixth form students are usually aged 16 at the start of their studies and complete their studies after

two years. Students then usually progress to Higher Education (HE), gain employment or seek vocational training.

A target setting policy advocates the use of **target grades**. Target grades are letters which correspond with the grading of A levels and AS levels which are qualification types offered by educational bodies in the United Kingdom and the educational authorities of British Crown dependencies. In Wales, students complete their AS qualification in the first year of their programme of study, which constitutes 40% towards their overall A level which is undertaken in the second year of study. Target grades range from Grade A* (the highest grade at A level), Grade A (the highest grade at AS level) Grade B, Grade C, Grade D and Grade E (the lowest pass grade). Students can also be awarded a Grade U which stands for unclassified and means that the student has failed to pass the qualification.

Every student within the college has an **Eilp**. This is an acronym which stands for Electronic individual learning plan. This records all information relating to the studentship of the learner. It includes information concerning attendance, punctuality, discipline issues, additional learning needs, prior GCSE attainment and results from all **formative assessments**. Formative assessment is carried out over the duration of the academic year and can be in many forms. All teachers within the college are expected to set at least two significant formative assessments per half term, and these results are recorded on the student's personal Eilp. **Summative assessment** is undertaken at the end of the year in the form of external assessment and it is hoped that the student's target grade matches the grade they receive following their summative assessment.

1.5 Thesis structure

This thesis comprises the following chapters:

Chapter 1 Introduction

This chapter has provided a brief background to the introduction of national target setting policy within the field of education, followed by the policy and practice currently undertaken by the sixth form college which is the context of the research. Key terms and acronyms are defined. The

researcher's own background and rationale for the study has been outlined, along with an overview of the thesis structure. It concludes by stating the research questions that this thesis is addressing.

Chapter 2 Literature Review

This chapter begins by explaining the research strategy employed in systematically selecting the most appropriate literature. It will then provide a narrative for the possible factors that led to target setting across the public sector, with particular focus on the field of education. Limitations of this approach will briefly be explored, along with a consideration of how it was intended to address national educational inequalities in attainment. Research will be described that explains these educational inequalities, with the conclusion that interpretations of educational success or failure based exclusively on social class, ethnicity or gender do not explain the complexity of the data. This will then lead to considering a body of research which has focused on the interrelationship between social and psychological factors that may affect self-belief and ultimately educational performance. The constructs of self-efficacy and locus of control will be introduced and research pertaining to academic behaviours and attitudes relating to these will be considered, along with the impact on educational attainment and how this field of research can be applied to target setting. Feedback and self-regulation as factors contributing to academic success will also be described.

Chapter 3 Methodology, research design and methods

This chapter begins by stating the theoretical perspective adopted by this thesis, followed by the ontological assumptions and epistemological orientation. It will then describe the case study approach, context and population from which the participants were selected. The research design will outline the four phases of data collection undertaken which consisted of Phase 1 - generation of the sample by using the results obtained through questionnaires, Phase 2 - carrying out interviews, Phase 3 - collecting and analysing individual studentship information and Phase 4 - comparing target grades to actual grades achieved. The methods used to collect and analyse the data will then be described and how they address the research questions. The implications of being an insider researcher will then be explored. Finally, ethical considerations in planning the research design will be described including issues related to the credibility and the quality of data collected.

Chapter 4 Findings

This chapter presents the findings in response to each of the research questions. It begins by describing how the target setting policy was undertaken at the college, from the perspective of the participants. Two overarching themes relating to the participant responses of being assigned target grades are identified. These are Engaged Students and Non-Engaged Students which describes the engagement that students had with being assigned target grades. A diagram illustrates two subsets emerging from each theme. These subsets represent the grouping together of participants with similar experiences in order to produce narrative pictures which explore and analyse their experiences within a time frame. The two subsets emerging from Engaged Students are Encouraged Engagers and Discouraged Engagers, while the two subsets emerging from Non-Engaged students are Disregarding Engagers and Autonomous Non-Engagers. These subsets are supported by vignettes of specific participant experiences in an attempt to bring these experiences to life.

Chapter 5 Discussion

As described in Chapter 2 (the Literature Review), considerable research has explored self-belief and how it can impact on academic behaviour, attitudes and attainment. This chapter examines the extent to which self-belief may have impacted on perceptions, experiences, academic behaviour and actual outcomes of each grouping described in Chapter 4. This chapter explores the findings described in the previous chapter and how these relate to established research concerning target setting theory, the locus of control and self-efficacy. This will lead to inferences in relation to the shared experiences of each subset to promote coherence and further professional dialogue.

Chapter 6 Conclusions

This final chapter draws together the main findings of this research which has attempted to describe and analyse the experience of target setting with twelve participants over an academic year. The underlying premise that has emerged from this research is that students are unique and the meanings, interpretations and ultimately actions that they create and act on in response to college policy initiatives cannot be assumed to be the same for all. The next section of this chapter addresses each research question by summarising the findings and related discussion, as well as stating the main conclusions from the research. The implications for senior leaders, classroom

teachers and tutors as well as students themselves will also be considered. The chapter then describes the reflections on the researcher's positioning in terms of the context for the research, the motivation to focus on this topic, the engagement with the literature, methodological considerations, and the effectiveness of the data collection methods and analysis. It then reviews the perceived overall strengths and limitations of the research and concludes by explaining the influence of the research study on the authors' professional practice, including professional recommendations and final comments.

1.6 Research Questions

This study seeks to answer the following research questions:

- 1. What are student experiences of a target setting process?**
- 2. What academic behaviours and attributes are exhibited following the implementation of a target setting process?**
- 3. Are students who engage in the target setting process more likely to achieve their target grades?**

The next chapter explores the literature pertaining to target setting and related academic behaviours and attitudes in order to provide a comprehensive rationale for addressing these questions.

Chapter 2 Literature Review

2.1 Introduction

The purpose of this Literature Review is to identify literature on target setting, self-belief and factors which affect educational achievement in order to provide a context for target setting policy within educational institutions, a theoretical framework for self-belief, and to identify gaps in the research evidence, thus paving the way for this research.

The literature is presented in terms of themes: the emergence of target setting policy; the limitations of target setting; inequalities in educational achievement; student beliefs, target setting and educational attainment; theories relating to beliefs about self; beliefs about ability (self-efficacy) and academic achievement; locus of control and its association with intelligence and other academic behaviours; self-efficacy and self-regulation as factors in academic success; and finally feedback and self-regulation as factors in academic success.

This chapter begins by explaining the research strategy employed in selecting the most appropriate literature. It then discusses possible factors that led to target setting across the public sector with particular focus on the field of education, along with a consideration of how it was intended to address national educational inequalities in attainment. Research will be described that explains these educational inequalities and it will be concluded that interpretations of causes of educational success or failure which are based exclusively on social class, ethnicity or gender do not explain the complexity of the data. This will then lead to considering a body of research which has focused on the interrelationship between social and psychological factors that may affect self-belief and ultimately educational performance. The constructs of self-efficacy and locus of control will be introduced and research pertaining to academic behaviours and attitudes relating to these will be considered, along with the impact on educational attainment and how this field of research can be applied to target setting.

2.2 Search strategy

A search was undertaken by identifying key search terms as in Table 1. There were two main strands relating to target setting research and self-belief; however, it was quickly noted that both of these topics were too broad and the Boolean search technique was employed to limit research to the field of education. This mainly involved AND, OR and NOT. Many studies were carried out in a university setting, so literature was further refined to identify research that had been carried out in college settings. Further literature was also identified by noting relevant research cited within papers, for example, and recording the reference in order to locate the original source. This was particularly effective with some of the findings pertaining to the locus of control within the field of education. Collected literature was then filtered against credentials of authors, their contribution to the research area and date of publication. In some cases, publication dates were very old but due to the seminal status of the author were still deemed appropriate.

Search terms related to target setting	Search terms related to self-belief
'Target setting' AND education	(LoC OR locus of control) AND education
Setting AND targets	(LoC OR locus of control) AND (achievement OR outcomes OR results OR attainment)
Reductionism AND education	(LoC OR locus of control) AND (academic behavior OR studentship OR procrastination)
Target AND (school OR college OR university)	(LoC OR locus of control) AND confidence OR motivation
"raising standards" AND education	(Self AND efficacy) AND learning AND education AND academic behaviours
"educational inequality" AND targets OR goals	(Self AND efficacy) AND (self AND regulation)
	(Self AND locus efficacy) AND (achievement OR outcomes OR results OR attainment)

Table 1: Examples of search terms used in search strategy

2.3 The emergence of target setting policy.

As introduced in Section 1.1, the practice of target setting, which traditionally was a practice carried out in the private sector, is now highly prevalent across the public sector, including the field of education. The words 'raising standards' now appear synonymous with the notion of setting targets and working towards an ever-increasing number of targets (Kerry 2002; Cambridge Assessment 2013).

Ball (2003) has attributed powerful agents such as the World Bank and The Organisation for European Economic Co-operation (OECD) to this reform. He argued that target setting policies are very appealing to politicians, as they can be seen as tackling the negative associations relating to bureaucracy by aligning public sector organisations with the methods used in the private sector. Central management bodies have traditionally been criticised for adopting a micromanagement approach, where the practice of setting targets could be seen as tackling this by creating an overall framework for improvement that could easily be measured. This mode of regulation links performance to measures of productivity that can be judged and compared in order to represent the worth, quality or value of an individual or organisation within a field of judgment.

Target setting as a method of control and its relation to performance management has been termed a reductionist approach (Caulkin 2002; Gregory 2007). This refers to the theory and practice of solving problems by placing attention on constituent parts or components (Gladwin et al. 2009). The strategy involves emphasis on standardisation and efficiency, where control and performance management methods are applied that involve stringent top down target setting, which is then closely monitored. Consequently, rewards and penalties (including league tables in the education field, for example) are applied that bring the system closer to the desired target. Furthermore, as a process, target setting is suggested to promote accountability which is desirable for government bodies. Meeting set targets can, therefore, be considered as a sign of effective management and, through target setting, expectations and standards will be raised (DfEE 1997; Blanchard 2003; Brain et al. 2006).

Other authors have used the term 'performativity' to describe the target setting policy initiatives of the 1990s. Ball (2003) defined performativity as:

A new mode of state regulation...required individual practitioners to organize themselves as a response to targets, indicators and evaluations...to set aside personal beliefs and commitments and live an existence of calculation (p215).

Consequently, the move to target setting practice within the public sector was seen as a transparent means to secure improvement. Through setting targets, improvements could easily be measured and, at the same time, tackle the criticisms relating to bureaucracy that the public sector had faced. However, the next section will describe limitations that have been levied at such target setting policy.

2.4 Target setting limitations

Chapman (2004) stated that *'mechanistic and reductionist thinking is deeply embedded in the culture of government'* (p79). Focusing on the performance of parts in isolation can be regarded as failing to understand that the performance of a system is a product of managing the interactions between its parts (Ackoff 1981; Caulkin 2002). Emphasising parts of a system through target setting may cause neglect to the other aspects of the system and result in unintended 'emergent' parts or properties that may be regarded as desirable or equally, undesirable (Jackson 2000). These concerns can be linked both to the failure of the system to recognise individual differences (termed depersonalisation) and with the philosophical nature of target setting itself.

Within the educational field, those critical of mechanistic and reductionist approaches suggest that the language associated with performance management and the target setting culture of education institutions has led to depersonalisation – that is a failure to respect young people as persons. Politicians have established targets to create the label 'successful', and then are able to apply this label if targets are met (Pring 2012). Therefore, achievement of school targets are what defines a successful school and not success at an individual level. Furthermore, target setting has been likened to a lemon squeezer. The analogy is based on the perception that schools are under enormous pressure to 'squeeze' more out of their students over time but there needs to be the realisation that, like lemons and juice, schools only have a finite proportion of students who can

achieve national targets (Bremner & Cartwright 2004). This analogy can be seen in the Figure 2 below.

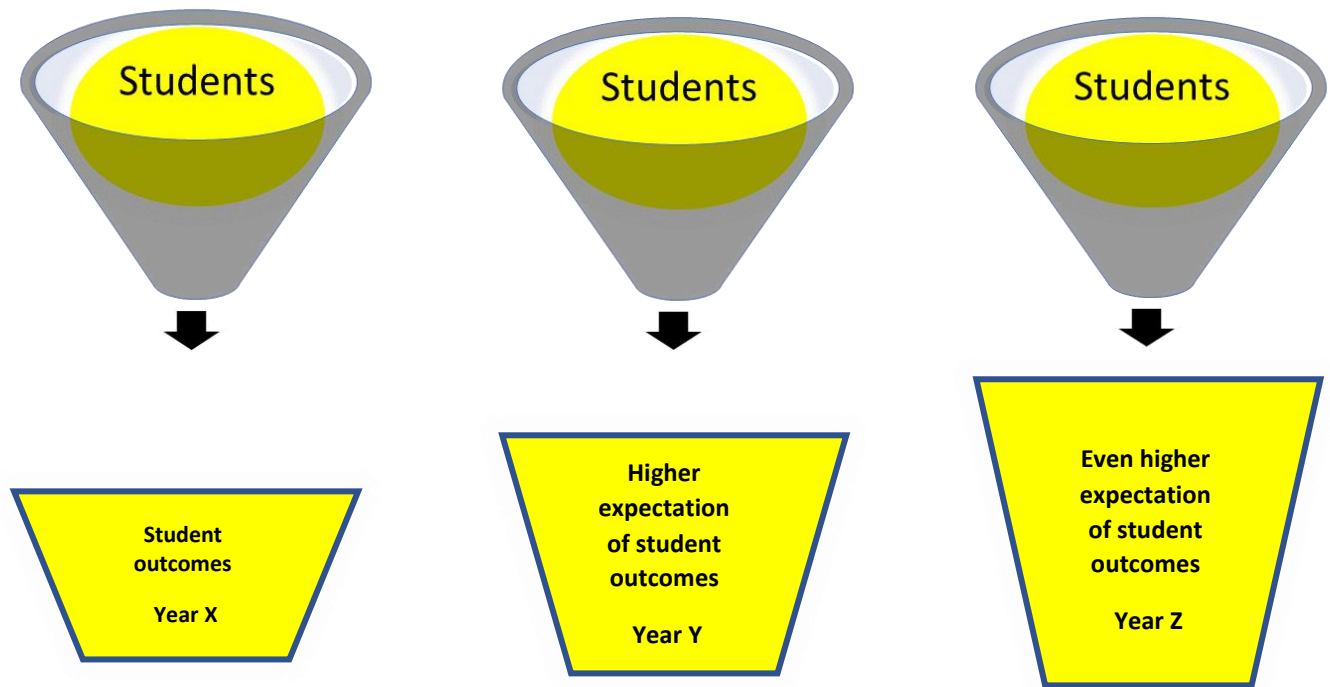


Figure 2: The analogy of a lemon squeezer in relation to student outcomes

Schools vary in terms of their diversity so achievement of national targets can be challenging where there is greater diversity, especially in relation to socioeconomic status and, as Bremner and Cartwright described, there is the added pressure to improve attainment on a yearly basis. Due to the impersonal nature of targets, adopting a mechanistic and reductionist approach treats all inputs as homogenous by the very nature of failing to recognise difference. Cuban (2005) summed up this point:

A successful businessman told an audience of teachers 'if I ran my business the way you people operate your schools; I wouldn't be in business very long'. The success of his blueberry ice cream lay in the meticulous way in which he selected his blueberries, sending back those which did not meet the high quality he insisted upon. To this a teacher replied. That's right.... And we can never send back our blueberries. We take them rich, poor, gifted, exceptional, abused, frightened...we take them all. Every one. And that is why it is not a business. It's a school (p3).

Cuban's blueberry example thus exemplifies the fact that inputs are not homogenous to which parallels can then be drawn to schools, students and processes in potentially recognising limitations to target setting processes. The perceived failing to fully understand the complexity of a given system has contributed to this research, but it must also be stated that the drive to secure improvement in educational attainment is still regarded as essential in order to reduce educational inequality as described in the next section.

2.5 Inequalities in educational achievement

The main thrust of education reform has been founded on the notion of improvement. Terms such as efficiency, accountability, performance and outcomes have all been foci for 'improvement'. By implication, the goal of raising improvement suggests that the levels of efficiency, accountability, performance and outcomes, for example, are not seen as satisfactory by certain stakeholders. This dissatisfaction may in fact be substantiated. In terms of international comparisons, the United Kingdom (UK) does not perform especially well in the OECD Programme for International Student Assessment (PISA) where England was ranked 11th out of 18 for mathematics in 1992 (IAEPM II 1992). The latest PISA results undertaken now by 72 countries in 2015 (OECD 2018) show the UK ranked as 14th for science, 20th for mathematics and 20th for reading. Only science falls into the top quartile of the distribution. In terms of gender differences, PISA has consistently found that across all participating countries, girls outperform boys in reading by 27 score points. Contrastingly, on average boys perform better than girls in mathematics by eight score points. The smallest difference is found in science, where, on average, boys outperform girls by four score points (OECD 2010, 15). In terms of socio-economic status, across all participating countries, advantaged students (those in the top quarter of the distribution on the PISA index of economic, social and cultural status) score significantly higher than those in the bottom quarter of the distribution for science, mathematics and reading. For example, advantaged students perform 88 points higher than disadvantaged students in science. Whilst there are clear differences in performance between countries, there are also in-group differences. In terms of Welsh student inequality, the picture is fairly comparable with the findings of PISA. For all ethnic groups analysed there is a Free School Meals (FSM - which is used as a measure of deprivation) related gap in pupils' GCSE achievement in

2013, although the size of this gap varies across groups. The biggest variance between pupils who receive free school meals and those who do not, is from Pakistani ethnicity (Nelson & O'Beirne 2014). There is also a gender gap in GCSE attainment which is consistent across all area deprivation deciles, with 49% of boys achieving the Level 2 threshold and 57% of girls (Nelson & O'Beirne 2014). Nelson and O'Beirne conclude that there is no simple solution in addressing these inequalities and suggest that a combination of targeted preventative interventions, including additional tracking support (of which target setting could be attributed), alongside additional support and catch-up activities is required.

Strand (2013) sought to undertake research in order to determine which of these factors (gender, socio-economic status or ethnicity) had the greatest contribution to educational achievement inequalities, and how these factors interacted with one another. In analysing the educational achievement of 15,000 students in a longitudinal study at ages 11, 14 and 16, he concluded that, at age 16, socio-economic status was the most significant factor contributing to achievement gaps. Indeed, the achievement gap associated with social class was double the size of the largest ethnic gap and six times as large as the gender gap. In terms of understanding the interactions between these factors, Strand concluded that such interactions were highly complex and that interpretations of educational success or failure based exclusively on social class, ethnicity or gender do not explain the complexity of the data. Therefore, exploring the interrelationship between social and psychological factors may better help understand this complexity.

A body of research has focused on the interrelationship between social and psychological factors that may affect educational performance. Such researchers have reported that academic performance is associated with socio-psychological variables including the locus of control, self-efficacy and self-regulation which will be explored in the next sections (Zimmerman 2000; Adeyemo 2005; Rheinschmidt & Mendoza-Denton 2014). In an attempt to understand the complexity relating to social class inequalities and academic achievement, Rheinschmidt and Mendoza-Denton (2014) focused on psychological influences as a result of social class categorization. Their research aimed to explore how students' expectations about being discriminated against on the basis of their social class background (namely class-based rejection sensitivity) could affect their academic achievement. Specifically, they focused on students' goal pursuit and whether students' beliefs about whether people have the capacity to grow and change (incremental beliefs), as opposed to entity beliefs where personal characteristics are believed to be fixed, in conjunction with class-

based rejection sensitivity were a significant predictor of resilience and success in college. Across four studies, they consistently found that class-based rejection sensitivity and entity beliefs jointly predicted university outcomes. Hence, it follows that students' beliefs appear entrenched in academic performance and, consequently, exploration of this topic will benefit education providers and students in providing useful insight.

2.6 Student beliefs, target setting and educational attainment

As seen in the preceding sections, governmental and educational inspectorate commitment to target setting policy within education is deep-seated, and the process of target setting *per se* and assumed impact on academic achievement appear relatively unchallenged in educational environments. Nonetheless, there is limited evidence to link the act of setting targets to raised achievement and overall improvement in educational outcomes (Flecknoe 2001; Higham et al. 2001). Nevertheless, a large volume of research has identified that target setting can act as a motivational process for some individuals, although the link between target setting and its direct impact on attainment is not fully substantiated. For example, Dagley (2004) suggested that students with goals are able to experience confidence in their ability to actually attain the goal and will engage in activities that they believe will lead to this attainment. However, this was a very small-scale piece of research involving one English primary school and ten pupils as case studies, which undertook analysis of school documentation, the pupils' exercise books, their school reports for two years, their pupil planners and three interviews with each pupil over a year. The ten pupils were also selected as defined by their teacher as 'quiet' and 'average' which further limits the generalisability of such findings.

In an attempt to understand how target setting could directly impact attainment, Waite et al. (2009) carried out semi-structured interviews with staff and students in a mainstream secondary school and a special school in England. Again, it was carried out on a small scale (especially with respect to student feedback) as data collection involved attending three meetings with staff, interviews with 21 staff and only six students. Time scales in collecting this feedback were also not provided. They concluded that target setting was only effective for those students who were aware

and convinced of the benefits, although it is noted that these studies were conducted quite some time ago so are not contemporary. Nevertheless, it is argued that belief systems may be important components in understanding the effectiveness of target setting processes.

The use of semi-structured interviews was adopted by Younger and Warrington (2009) in ascertaining the impact of mentoring and target setting in both a further education (FE) college and a sixth form college in England over a four-year period. They concluded that 86% of students (which actually only accounted for 24 students in total) in the further education college felt that mentoring and target setting were very important factors in determining their achievement at GCSE.

Contrastingly, in the sixth form college, 63% (accounting for 26 out of 41 students) felt that, although mentoring and target setting were facilitating, encouraging and supportive, they made little difference to the GCSE grades they eventually achieved. It is worth noting that the processes of mentoring and target setting in Younger & Warrington's (2009) research had been considered simultaneously. They had not explored the benefits of mentoring or target setting independently so it is therefore difficult to attribute such findings to target setting in isolation. It is also relevant to consider these conclusions in light of the GCSE profile of students who attended the sixth form college and the FE college. Most students interviewed at the sixth form college had between six to ten higher level grades at GCSE, whereas those at the FE college had between five to eight GCSEs at mainly grade C in a narrower range of subjects. Therefore, this research may be implicitly making an association between ability level and the impact of target setting and mentoring on attainment. Students with different GCSE profiles may be more or less likely to benefit from target setting processes, hence re-introducing the earlier notion of individual differences in target setting effectiveness.

In contrast to the small-scale research discussed above, it is pertinent to note that Wang et al.'s (1993) research used evidence from 61 research experts, 91 meta-analyses and 179 handbook chapters and narrative reviews in the form of content analysis, expert ratings and results from meta-analyses. Their goal, which was supported by the US Department of Education and Temple University Centre for Research in Human Development and Education, was to identify and estimate the influence of educational, psychological and social factors on learning. They concluded that there were 228 variables that influenced school learning, grouped into 30 categories. Target setting fell into the Classroom Practices category which was found to be the second most influential effect.

The greatest impact on academic achievement was found to be Student Characteristics including individual motivational and affective components in which self-belief is clearly rooted.

Research that makes the link between target setting and increased attainment was produced by the Government's Learning and Skills Development Agency (Martinez 2001) which stated:

The best argument for implementing target setting processes is they work...the evidence for this comes from two main types of research – large scale international reviews of educational research on effective teaching and small scale case studies mainly from England (p2).

However, the lack of impartiality must be acknowledged in such a source as well as the potential to challenge such circular reasoning. Indeed, in the above premise it seems that the truth of the claim is already accepted. Nevertheless, in support of this claim, Martinez (2001) partly drew on case studies prepared by six sixth form colleges and six Further Education and tertiary colleges. Runshaw College reported that they gave all advanced level GNVQ (equivalent to A level) students a target based on their average GCSE point score and/or prior attainment at Intermediate level GNVQ. They also restructured the pastoral programme and ensured teachers, tutors, managers and support staff had clear roles in supporting students in achieving their target. Over a two-year period, their pass rate increased from 95% to 98%, the proportion of students achieving a merit increased from 27% to 43% and, most significantly, the proportion of distinctions increased from 5% to 37%. Martinez (2001) described three types of models for target setting that institutions use: quantitative, qualitative and a combined model, where Runshaw College's system was that of a quantitative approach in that the main focus was on the setting, monitoring and achievement of a target grade based on an average GCSE point score. Other colleges have adopted a qualitative approach whereby, instead of using an average GCSE point score, a variety of other input measures are used to create a target grade. This may include assessment of key skills at the outset, intelligence/capability tests and student performance indicators such as attendance, punctuality, taking up of learning support and submission of work to deadlines. Sutton Coldfield College adopted this qualitative approach and developed a Student Tracking and Achievement Record (STAR) system where their goal was to review student progression from a holistic perspective along with encouraging students to take more responsibility for their progress. They reported demonstrable improvements in both retention and achievement for their vocational qualifications.

Nevertheless, while Martinez (2001) recognised the merits of target setting, he also described prerequisites and objections relating to the use of targets. At the outset he stated:

For targets to be both challenging and achievable it is important to consider the process of teaching and learning. Targets need to be negotiated and agreed with the tutor, but owned by the student. This ownership has cognitive, emotional and motivating elements...If targets are not achievable, demoralisation and disengagement will follow (p1).

Martinez grouped objections to the introduction of target setting into six main areas. Firstly, the criticism of discrimination has been levied where realistic targets for lower attaining students (for example, a grade E) will be demotivating and may lead to lower achievement and possible withdrawal from study. Similarly, there is the criticism of a target reinforcing a self-fulfilling prophesy. A student with a low target may work down to their teacher's low expectations of them. Scepticism and disbelief have also been aired, where it is contended that outcomes are so individual that it is not possible to predict with accuracy or within a set time scale. The criticism of reductionism has already been raised earlier; however, in relation to individual based target setting, setting a target implies a narrowing of the many and varied purposes of learning, and finally critics have stated that target setting contributes to a loss of professional discretion. Setting targets will lead to greater control of teachers and the potential blaming and scapegoating of such teachers whose students do not achieve their targets. Despite these objections, which Martinez acknowledges are valid, he stated that:

'...the evidence suggests that the outcomes of target setting more than justify the effort involved...[and] are exceptionally powerful cognitive and motivational tools...' (p3).

Consequently, the next section considers cognitive theories relating to motivation and attainment.

2.7 Theories relating to beliefs about self

Not only is there is a plethora of cognitive based research concerning self-belief and academic performance, but there are also many types of personal beliefs that have been linked to academic achievement. Cognitive approaches attempt to understand the influence of thoughts and beliefs and include seminal theoretical vantages such as social cognitive theory (Bandura 1977) and social

learning theory (Rotter 1982). Bandura's social cognitive theory highlights self-efficacy, which denotes a person's belief about their capabilities to produce performances that influence events which will then affect their life. In order to have beliefs about what one can accomplish, one must have beliefs about whether it is possible to accomplish it (Bandura 1977 p434).

Rotter's locus of control (LoC) is conceived as a belief that a response will, or will not, influence the attainment or reinforcement of any particular outcome in one's life (Rotter 1966). It can be regarded as a continuum, where individuals with an internal locus of control believe that the environment is responsive to personal agency and that outcomes, such as incentives or punishments, can be predictably obtained. This emphasizes the belief that outcomes depend primarily on own efforts (Spector 1986). Conversely, those with an external locus of control view the environment as mostly unresponsive and outcomes as relatively uncontrollable, where outcomes are primarily matters of fate or chance. It is important to stress that there is a fundamental difference between self-efficacy and locus of control; self-efficacy focuses on beliefs about abilities whereas the locus of control is concerned with beliefs about control (Jones 2007). However, both can be regarded as motivational mechanisms which may influence educational achievement and, by implication, strategies to improve attainment such as target setting. These two constructs are explored in more detail below.

2.8 Beliefs about ability (self-efficacy) and academic achievement

Student self-efficacy has emerged as an important construct in educational research over the last forty years. Self-efficacy describes how confident a person is regarding their ability to reach a goal or achieve something (Lampert 2007) or, as Bandura (1977) stated:

'Beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments' (p3).

Bandura contended that people will tend to choose activities which they feel themselves capable of undertaking and avoid those for which they do not. The stronger their feeling of self-efficacy in relation to an activity, the more time they will spend on it and the less likelihood of them giving up.

Individuals with a low self-efficacy will also often perceive tasks as more difficult than they are which may also accentuate feelings of failure, depression and helplessness.

Bandura (1977) outlined four main sources of information that create students' self-efficacy – enactive mastery experiences, vicarious (observational) experiences, social persuasions and physiological/psychological states. Enactive mastery experiences are considered as the most powerful contributor to self-efficacy, and refer to an individual interpreting whether the results of a task are a success or failure. It can be speculated how a student receiving a grade for a substantial piece of work, and then comparing and interpreting this grade to their target grade, can promote or detract from enactive mastery experiences. Vicarious experiences refer to students comparing themselves to others, and then reaching conclusions about their own capabilities. Again, observing that a classmate has achieved their target grade, when they have not, may result in lowering feelings of self-efficacy. Social persuasions such as feedback on work is another way in which students can receive information that affirms and persuades them that they are able to perform a task. This then can impact on feelings of self-efficacy. Bong and Skaalvik (2003) stated that social persuasion is most effective if it is performed by someone who is viewed by the student as being knowledgeable and reliable. Finally, a student's physiological, emotional and mood state can also affect their self-efficacy. If they are feeling anxious or tense, this may act to enfeeble their level of self-efficacy (Pajares 1997).

Nevertheless, in academic settings researchers have measured some of these sources in very different ways which Usher and Pajares (2008) regard as a limitation in relation of such research. When measuring mastery experiences, some researchers asked students to rate their past and current performance in different subjects. Scores from these items have shown strong reliability estimates (Britner & Pajares, 2006). However, when researchers ask students to self report previous grades achieved or to provide prior experience ratings ranging from no experience to a lot of experience (Johnson, 2005), this uses students' objective performance as an indicator of mastery experience. Interpretations of objective performances is not consistent with Bandura's concept of mastery experiences where he described them as interpretations individuals make of experienced events and not the overall objective performance. For example, the same grade achieved by different students can interpreted with devastation or indeed, pride.

Usher and Pajares (2008) also state that vicarious experiences are often measured too simplistically or again are at odds with Bandura's conceptualisation and as a result, researchers have reported

low to modest reliability coefficients for scores on items that have been used to assess vicarious experience (Stevens et al. (2006). For example, some researchers have asked about peer and adult modelling experiences but have not made a distinction between peers or adults, yet research suggests that peers and adults have very different influences at different developmental stages (Pinker 2002). In addition, Bandura (1977) believed that peers influenced student's self efficacy beliefs much more than adults. In research, students have also been asked to provide the highest education degree achieved by member of their family, but there was no assessment made of the students' interpretations of this vicarious influence (Chin & Kameoka 2002) which is not in line with Bandura's explanation of vicarious experiences. These measurement issues imply a limitation of research conducted in relation to sources of self-efficacy and ultimately construct validity.

Despite these concerns, extensive research suggests that there is relationship between self-efficacy and academic achievement (Akhtar 2012; Li 2012; Shah & Anwar 2014), with some researchers proposing it is the strongest predictor of academic achievement (Soom & Donche 2014). In the education field, it is also seen as an important variable because it affects students' motivation and learning in aspects such as the tasks they choose, their exertion, perseverance and overall performance (Schunk 2005a,b). Schunk and Parjares (2010) contended that individuals must believe that they can actually achieve their desired goal. If they lack confidence this will result in less motivation to act in the perceived challenging situation.

From the work of the aforementioned authors, it could be argued that these findings can be linked to target setting effectiveness. An individual with high levels of self-efficacy may feel more confidence in achieving their target grades, which increases their motivation in terms of exertion and perseverance, and this in turn should result in a desired attainment level of academic achievement. Certainly, research does indicate that individuals with high self-efficacy are able to exhibit behaviours that are supportive in promoting positive academic achievement. They are able to plan and manage their time more effectively as well as using behavioural and environment supports wisely (Zimmerman 1995). Individuals are also able to cope better with academic stressors as suggested by Hackett et al.'s (1992) research based on 217 participants, although these participants were a very distinct subset of American university engineering students. Jones (1999) proposed that individuals with low self-efficacy are prone to procrastination, tardiness, avoidance of class or assignments, and failure to seek help. Again, this study was based on American freshmen and women, which may be unrepresentative of the general population. This lack of representation

could be related to intelligence, or affluence for example, if it is accepted that one has to have achieved a higher level of attainment in education and have a certain level of financial backing to attend American universities. Carden et al.'s (2004) study of responses to a survey completed by graduate students from a mid-sized south eastern American university also supported Jones (1999) in terms of their findings. With respect to actual goal setting, they found that those students with high self-efficacy tended to take on challenges more readily, set long term and medium term goals and used strategies to attain them. However, again the lack of representation should be noted.

However, Sucuoglu (2018) also linked socio-economic status to self-efficacy and academic achievement, but the direction of these correlations is unclear. Again, using psychology students at a US university, Sucuoglu reported a statistically significant difference according to mother's and father's education status and family monthly income. Academic achievement was lower in unschooled parents and where there was low monthly income (less than 5000 Turkish Lira). Levels of self-efficacy were also higher in students whose families earned more than 5000 Turkish Lira. In line with other research, they also concluded that there was a significant correlation ($P < 0.05$) with students' scores on the self-efficacy scale and academic achievement. Akin to Sucuoglu's research in exploring multiple factors, Booth et al. (2017) investigated the relationship between ethnicity, ethnic identity, self-efficacy (in terms of specific subjects and not a generic rating which is a departure from most literature in this field), and academic achievement among middle and high school students in the US Midwest. Using a mixed methods approach, 482 students (Autumn) and 392 (Spring) students were surveyed and interviewed over the course of one year to explore the interaction of these variables. They found a statistically significant correlation between prior mathematics performance (but not reading) and overall levels of self-efficacy. They also found the success (or lack of success) in mathematics directly influenced students' later perceptions of their self-efficacy in mathematics. This may demonstrate the importance of enactive mastery experience where success influences future perceptions relating to the likelihood of doing well. However, they also found a strengthening of ethnic identity and self-efficacy over the academic year. For some minority groups, a strong ethnic identity served as a protective factor in efficacy development. However, the protective factor was not found in all ethnic groups. For example, five out of the seven African Americans (from a sample of 38 participants with differing ethnicities) commented negatively about mathematics and their ability in mathematics which led Booth et al. (2017) to speculate that individuals may also be influenced through a group consciousness perspective where

social stereotypes may affect both ethnic identity formation and self-efficacy. Therefore, this could be seen to be akin to Bandura's (1977) descriptions of vicarious experience and verbal persuasion influences.

In summary, much research does substantiate the view that beliefs about ability impact upon academic behaviours and academic achievement. It can also be concluded that there is complexity where many other factors interact with one another including ethnicity, parental educational attainment and income. This interrelationship of self-belief, academic behaviour and achievement in conjunction with other factors suggest that the experiences of students are all very different. Simple cause and effect considerations such as the act of setting targets will result in students achieving these targets do not recognise this complexity.

2.9 Beliefs about control (locus of control) and academic behaviours

The LoC is a construct that has attracted considerable interest in many diverse fields, resulting in the development of a large number of LoC measurement scales. They have been applied in areas such as health (Wallston et al. 1976), personality (Wambach & Panackal 1979), neuroticism (Judge et al. 2003), intelligence (Ollendick & Ollendick 1976), depression and anxiety (Culpin et al. 2015) and education (Zimmerman 1995). As discussed in the previous section, using an 'academic' LoC scale, Jones (2007) suggested an internal or external LoC could be attributed to psychology grades achieved at an American college in the first semester. They can also be seen to predict freshman GPA scores (Nordstrom & Siegrist 2009), completion of work set through distance learning within required timescales (Trice & Milton 1987), and completion of homework before deadline dates (Janssen & Carton 1999). However, the populations for these studies can be considered as unrepresentative in that they are American university students, and often involve only psychology students.

The locus of control has received both methodological and theoretical criticism. The methodological concerns relate to the scale used in measuring the construct. Rotter claimed his scale was one dimensional (Internal – External), but other researchers have carried out research that suggests the scale may include additional factors. For example, Lange and Tiggesmann (1981)

contended that whilst one half of the scale covered one's sense of control over personal life, an additional factor measured control in relation to the political world. Other researchers have also identified additional factors to the one that Rotter had focused on. For example, Gurin et al. (1978) distributed the scale to a representative American sample and in analysing the responses identified three factors – personal control, control ideology and political control. These findings can potentially lead to questioning whether simply focusing on internal and external attributions are sufficient in understanding the reasons people use to explain events, actions and behaviours.

A theoretical criticism concerns whether the locus of control is a core construct or whether it is related to other constructs. Judge et al. (2002) carried out an extensive meta-analytical study and in examining 75 studies found that the locus of control's correlation was .40 with emotional stability, .52 with self-esteem and .56 with generalized self-efficacy. This led them to contend that these four variables should be considered as indicators of the same core construct.

In spite of these perceived shortcomings, the locus of control construct does seem to effectively predict certain attitudes and behaviours. For example, the LoC has also been related to teenagers' outlooks within the field of education and how this affects their human capital investments (Coleman & DeLeire 2003). In this study, human capital investment describes a teenager's decision to invest in their education. Teenagers who believed that their human capital investments or other 'internal' factors had a strong impact on their future opportunities, were more likely to complete high school or attend college, while those teenagers who believed labour market success depended little on human capital investments and more on luck, fate or other external factors were more likely to drop out of high school or fail to attend college. It is proposed that these findings can be applied to target setting processes. It may be that those students who have an internal attitude may have more propensity in terms of actively participating in target setting and feeling motivated to achieve the targets. This is in contrast to a student who has more of an external propensity and therefore sees little benefit in engaging with the process.

Research nearly always treats the LoC as an independent rather than dependent variable. The research methods used in these studies almost always adopt forced choice or Likert scales which measure the extent of an internal/external loci of control and this is then correlated with the selected subject of interest, generally on a large scale. As a possible by-product in measuring a high or low LoC and then examining the impact of having a high or low LoC on a particular subject of interest, research has focused on the consequences as opposed to causes. Ahlin & Antunes (2015)

noted that '*very little is known about the antecedents of LoC orientation*' (p1804). Therefore, to some extent, this lack of knowledge could be attributed to the choice of methodological approach and research method. It can be contended that scales do not allow a deep look into the subject matter, nor do they encourage responses that open up new topic areas not initially considered, nor allow detailed pictures to be built up. Therefore, investigating the LoC using semi-structured or unstructured interviews, for example, in order to deeper explore this construct in relation to academic achievement, is seen as worthwhile and has contributed to this research design.

In recognising this antecedent gap, Furnham and Cheng (2016a) carried out a large-scale (n=3725) longitudinal study of British sixteen year-olds which focused on the antecedents of a LoC. Using a number of measures, they concluded that the most powerful correlate was childhood intelligence (statistically significant at $p < .0001$). More intelligent children tended to have a more internal LoC, while 16 year-olds with an external LoC tended to have lower intelligence, lower self-esteem, higher neuroticism, more behavioural problems and came from homes of lower social class and less well-educated parents. Therefore, the LoC and intelligence appear to be interrelated and can potentially influence (or be influenced by) many factors which impact on academic success. These are explored in more detail in the next section.

2.10 The locus of control and its association with intelligence and other academic behaviours

Dweck (1999) and Dweck et al. (2008) proposed a social-cognitive approach to intelligence whereby people can be attributed with having either an entity belief or an incremental belief. People who endorse an entity view about intelligence believe it is a fixed ability and adopt performance goals that are fairly easy in order to perform well compared to others (Dweck 1999). On the other hand, people who hold an incremental view do not consider intelligence as a fixed ability; rather it can be improved. They will be inclined to set mastery goals, which are goals related to being the best they can at a task. These tasks will generally require the learning of new skills in order to increase an individual's competence and they will also seek much more challenging tasks based on their belief in effort (Dweck 1999). Furthermore, Dweck et al. (1995) proposed that the belief that is held is

founded on LoC, and such beliefs *precede* the development of the LoC. Specifically, people who perceive an inability to control intelligence will then, for example, view negative outcomes in academic tests as out of their control, hence akin to the thought processes associated with an external LoC. They will also exert less effort to produce academic success and may become helpless when faced with academic failures (Dweck & Leggett 1988). Those who hold incremental views about intelligence will see outcomes as under their control and akin to the thought process associated with an internal LoC. They will also be much more likely to persevere when faced with negative feedback (Dweck & Leggett 1988). It is proposed that self-efficacy can be seen as entwined in these beliefs. Poor performance in academic tests could be an example of Bandura's enactive mastery experiences, and negative feedback could be considered as a social persuasion. Both of these could lower an individual's self-efficacy and contribute to poor academic performance.

In consideration of Dweck's approach in understanding intelligence, it is speculated that the use of targets could also be relevant and interrelate with entity and incremental beliefs. People with entity views may, therefore, lack effort in engaging in the target setting process in comparison with those with an incremental belief in intelligence, who may be willing to exert much more effort. Bodill and Roberts (2013) aimed to test the proposed relationship with LoC and intelligence and to determine whether entity/incremental beliefs or academic LoC were better predictors of academic effort and ultimately academic success. Their research involved a relatively small cohort of 94 students at a Western Australian university completing an online survey. Their research reported a significant association with entity beliefs and an external LoC which was found to be a significant predictor of hours studied per week. However, there was, possibly, a methodological flaw in their research. Their online survey asked participants how many hours per week they studied as a proxy for 'academic effort'. It could be argued that a highly focused period of studying may yield greater academic success than a lengthy period of unfocused studying as proposed by Plant et al. (2005), who stated that time spent studying is a poor predictor of academic achievement.

Dweck's research on fixed and incremental intelligence has also been subject to some criticism. One of the issues is that it does not fully recognise innate intelligence. From an education perspective, it encourages students to adopt a 'growth mindset' perspective based on an incremental view. To improve, a student needs to work harder and believe they can improve. However, Sisk et al. (2018) explored the extent and circumstances to which interventions to promote growth mindsets

improved academic achievement and found little evidence to support the link between growth mindset and improved academic achievement.

Nevertheless, the importance of highlighting this research is that an individual's LoC may influence (or is influenced by) their belief in intelligence, but also can potentially impact on related academic behaviours such as effort. For example, Haycock et al. (2011) defined academic procrastination as *'delaying duties and responsibility related to school, or to save them to last minute'* (p317). Deniz et al. (2009) explored the relationship between academic procrastination, LoC and emotional intelligence. Using the same technique as all of the LoC research considered thus far, surveys were distributed to 435 university students at a Turkish university, although there were significantly more female (273) to male respondents (162). They concluded that adaptability and coping with stress were highly correlated ($p < .05$) with students' procrastination tendency scores. Additionally, adaptability and general mood could significantly predict ($p < .05$) students' LoC scores. Indeed, the authors of the research also found a positive correlation with anxiety and procrastination in that anxiety was a predictive factor in procrastination.

2.11 Locus of control, self-efficacy and self-regulation as factors in academic success

Research recognizing the interplay of self-efficacy beliefs and LoC beliefs has grown in recent years. Alias et al. (2016) contended that learning requires both self-perception of being able to succeed on a task (self-efficacy) and a feeling of being in control of the event outcomes (LoC). They hypothesized that high self-efficacy along with having an internal LoC would lead to greater academic success in engineering students. They found that female engineering students had higher self-efficacy to males, although male self-efficacy was still high, while both males and females had similar LoC and learning effort. There was also an indirect relationship (with students who had an external LoC) in relation to self-efficacy and effort level against academic achievement. However, somewhat surprisingly, they did not find support for a relationship between self-efficacy and effort in relation to academic achievement for those students who had an internal LoC. This led to the

conclusion that the LoC is related to academic achievement while self-efficacy is related to effort which was a proposition which has not been widely documented in self-belief research.

In exploring the impact of multiple factors on academic performance, Komarraju and Nadler (2013) administered surveys to 407 undergraduates on an 'Introduction to Psychology' course at an American university. The surveys involved three measures including an 81 item Motivated Strategies for Learning Questionnaire (MSLQ) which had questions relating to LoC – internal/external, self-efficacy, metacognitive and cognitive learning strategies (rehearsal, elaboration, organisation and critical thinking). They also used an 8-item Implicit Theories of Intelligence Scale and an 18 item Achievement Goal Inventory which investigated normative goals (based on fixed intelligence beliefs) and mastery goals (based on incremental intelligence beliefs). They were able to conclude that the low self-efficacy group scored significantly higher than the high self-efficacy group on entity theory of intelligence (as opposed to incremental). The high self-efficacy group scored significantly higher than the low self-efficacy group on mastery goals.

Thus, the students who had high self-efficacy were more likely to believe that intelligence was changeable and determined by effort. In contrast, students who had lower self-efficacy were more likely to assume intelligence was a fixed, innate entity that cannot be changed. The students with high self-efficacy were also more likely to report higher levels of academic achievement, which appears contrary to Alias et al.'s (2016) findings. Nevertheless, the importance of both self-efficacy and LoC are also substantiated in research by Tella et al. (2011). In adopting an ex-post-facto approach, Tella et al. (2011) investigated LoC, interest in schooling and self-efficacy as predictors of academic performance among junior secondary school students in Nigeria. The sample consisted of 500 students from 25 secondary schools who were asked to self-assess themselves against three instruments (LoC Scale, Interest in Schooling Scale and Self-Efficacy Scale). In support of Komarraju and Nadler's (2013) findings, they concluded that each variable made a significant prediction of academic achievement, with the LoC making the most significant prediction, following by interest in schooling and then self-efficacy. They also contended that the three independent variables had a joint effect on academic achievement with 32.2% of the variance in the academic achievement of the junior secondary school students accrued to the linear combination of the three variables. Tella et al. (2011) concluded that it is imperative for students to develop an internal LoC for them to always attribute their success to their own efforts. To achieve this, they suggested that students should be taught self-regulation through developing goal-setting skills, along with proactive

implementation and monitoring. Indeed, researchers such as Zimmerman (2000) have purported that academic self-regulation is a powerful predictor of academic achievement and it has been proposed as a predictor of learning outcomes in different age groups (Whitbread & Coltman 2010). As a process, target setting requires an individual to self-regulate by comparing their target grade to their actual formative achievement grades over the duration of a programme of study. Based on the research already discussed, an individual with an internal LoC and/or high self-efficacy may be more inclined to undertake self-regulation.

Jouhari et al. (2015) investigated factors affecting self-regulated learning in medical students using semi-structured interviews. Participants were selected based on their GPA (grade point average) score which has been documented as having a relationship with self-regulation. Employing content analysis, the researchers described five themes that had emerged. One of themes termed 'self' referred to personal facilitating factors and personal inhibiting factors, where personal facilitating factors included being motivated, feeling that your actions affected your success, having high self-esteem and self-efficacy, and personal desire. Personal inhibiting factors included a lack of defined goal, lack of motivation, pessimism and lack of interest. They recommended that one of the most important focuses for instructors is to understand these themes and how they can contribute to better success for their students.

2.12 Feedback and self-regulation as factors in academic success

In exploring Jouhari's themes, feedback is clearly an area where instructors can help promote facilitating factors and minimise inhibiting factors. Hattie and Timperley (2007) stated that *'feedback is the one of the most powerful influences on learning and achievement'* (p81), and they made the distinction between different types and levels of feedback which can affect levels of self-esteem, motivation, self-efficacy and interest. Consequently, feedback does not necessarily enhance the learning experience because it can also be misinterpreted, appear threatening and ultimately be rejected. They define feedback as information provided by an agent, such as a teacher, peer, book or parent regarding an aspect of one's performance or understanding which can be seen be similar to Bandura's source of self-efficacy – social persuasions. Hattie and

Timperley (2007) presented a model that distinguishes four levels of feedback consisting of the task (FT), the processing (FP), the regulatory (FR) and the self (FS) and they regard these as being interrelated.

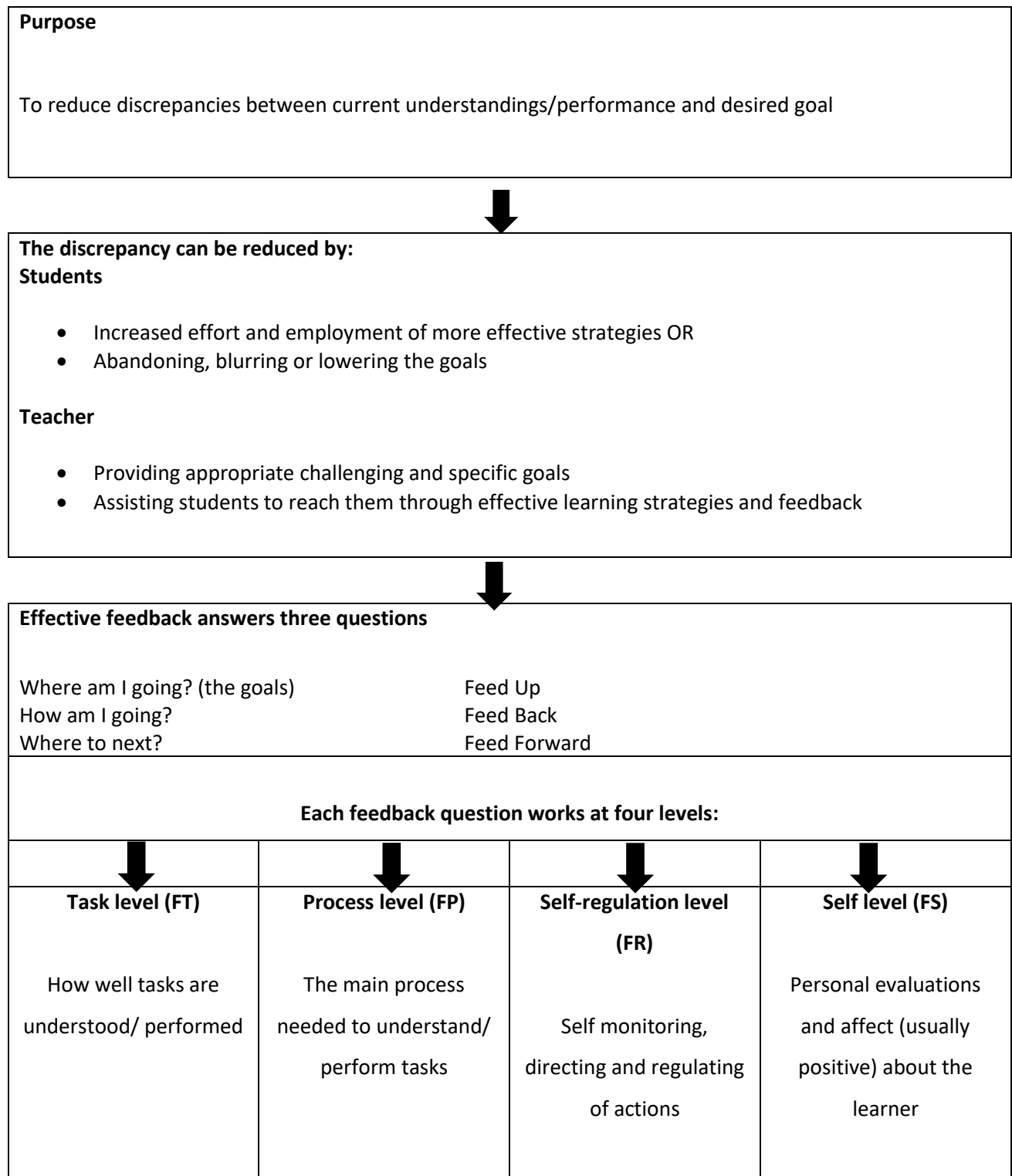


Figure 3: Hattie and Timperley's (2007) model of feedback to enhance learning

This framework's starting point is to define the purpose of feedback which, according to Hattie and Timperley (2007) '*is to reduce discrepancies between current understandings and performance and a goal*' (p86). Students can reduce the gap by increasing their effort, especially when this leads to undertaking more challenging tasks, as opposed to doing more at the same level. In increasing their efforts, they may develop better strategies to complete the task or self-regulate. However, students can also reduce the gap by abandoning goals which may lead to non-engagement or by setting themselves less challenging goals. Teachers can try to reduce the gap by setting appropriate challenging and specific goals and by clarifying such goals, and attempting to enhance students' commitment and effort by providing feedback. In doing this, Hattie and Timperley (2007) described three major questions which both teachers and students should seek answers to in order for the learning experience to be effective. The question 'Where am I going?' refers to the actual task or performance that is being expected and such goals are wide ranging such as passing a test or learning to ride a bike, which can also have success criteria attached that indicate the level of attainment. In addressing 'How am I going?', teachers and students may require information that reconciles current performance to an expected standard which is regarded as feed-back, and tests and assessments are often used to convey feed-back information. In addressing 'Where to next?' Hattie and Timperley (2007) contended that teachers often link this to students undertaking more tasks and taking in more information. However, they stated that feedback could also be used in a way where it leads to greater possibilities of learning in the form of enhanced challenges, more self-regulation over the learning process, more strategies and processes to work on tasks and generally a deeper understanding.

The bottom row of Figure 3 describes four levels upon which feedback may focus. Hattie and Timperley (2007) regarded feedback about self as being the least effective, whereas feedback about self-regulation (FR) and feedback about the processing (FP) of the task are most effective in mastery. Feedback about the task can contribute to enhancing FR and FP, and this type of feedback is most common and can be regarded as relating a criterion (for example: correctness) to a task accomplishment. Assigning a grade to a piece of formative assessment can also be regarded as feedback about a task. Feedback about self-regulation refers to students' commitment, control and confidence to a learning goal which, according to Hattie and Timperley (2007), implies '*autonomy, self-control, self-direction and self-discipline*' (p93). These academic attitudes are similar to the

inhibiting and facilitating factors identified by Jouhari in the preceding section. They state that there are six aspects that influence the effectiveness of feedback which include:

- the capability to create internal feedback and to self-assess. This can be done through students evaluating their levels of understanding, effort and opinions from others. They may assess their performance relative to others.
- the willingness to invest effort into seeking and dealing with feedback information. There are costs associated with this which include effort costs and face costs (which refer to the evaluative effects of others on the student).
- the degree of confidence or certainty in the correctness of the response. Research by Kulhavy and Stock (1989) concluded that feedback is most impactful when a student expects a response to be correct, but in actual fact, it is incorrect.
- the attributions about success or failure can affect self-image, self-efficacy and overall performance. It can be seen in two directions – firstly, where students receive overly positive feedback yet their outcomes are not successful, which leaves them confused and uncertain. Secondly, unclear feedback that does not explain how the student has been successful or not.
- the level of proficiency at seeking help. Many students do not seek help due to perceived threats to self-esteem or social embarrassment (Newman & Schwager 1993).

Both positive and negative feedback can be seen as promoting learning, but the level of the feedback is the overriding determinant and negative feedback is considered by Hattie and Timperley (2007) to be most powerful at the self-level, effective at the task level, but variable at the self-regulation level. A link between self-efficacy and the impact of positive and negative feedback was made by Swann et al. (1988). They found that students with high self-efficacy who had received positive feedback about themselves as students, especially if the feedback signified that they had a talent or potential ability, were able to cope better with disconfirmation feedback. Furthermore, they were more likely to seek unfavourable feedback in order to excel at tasks. In contrast, students with low levels of self-efficacy who had received positive feedback regarding how to improve either became more motivated to remedy any deficiencies, or it led to them avoiding tasks and future feedback. Consequently, negative feedback for some students with low self-efficacy may act to lower motivation levels. Clearly, beliefs about self, academic attitudes and behaviours exhibited, targets set, feedback provided and its impact, and the overall resulting attainment level is a highly

complex interplay; it is the area in which this research is hoping to provide deeper understanding and has led to the research questions stated in Section 1.6. This desire for deeper understanding has also arisen from a perceived methodological limitation of the literature related to self-belief and target setting as outlined in the next section.

2.13 A critique of the methodological literature related to self-belief and target setting

Research methods used in studies founded on self-belief and links to educational attitudes, behaviours and attainment almost always adopt fixed choice scales which measure the extent of an internal/external loci of control, for example, and this is then correlated with the selected subject of interest, generally on a large scale. This positivist approach relies on the participant answering a series of questions which are then subject to statistical manipulation and a series of generalizations are produced. Its purpose is not to explore the intricacies behind participant responses or understand, for example, what may be contributing factors to a participant's academic behaviours such as procrastination at a particular point in time. Research to date has not considered self-belief in relation to target setting, but if it had, the same approach could be taken where high/low self-efficacy could be correlated with questions relating to the use of targets. However, it is contended that this approach lacks depth and does not allow for individual experiences to be heard. Its generalizations are also based on capturing participant answers at a particular point in time which implies that participant perceptions are considered to be fixed. This research aims to capture data across an academic year from a variety of sources, so that a more comprehensive understanding can be established as will be explained in Chapter 3.

2.14 A summary of the Literature Review

This Literature Review began with an explanation of why target setting emerged including consideration of inequalities in educational achievement. This highlighted that the rationale for

target setting was to improve education attainment. It then outlined philosophical objections to the principle of target setting at a governmental level. The lens was then narrowed to consider individual target setting of students, where research concerning target setting and improved outcomes was described and critiqued. Objections to target setting were also described, and most of these objections recognised the cognitive and motivation elements that are not necessarily explicit in target setting processes. Cognitive based research relating to beliefs about self were then explored, with the constructs of self-efficacy and the locus of control being regarded as the most relevant and an exploration of research related to these theories in relation to education achievement and associated studentship behaviours. Related to academic behaviours, feedback and self-regulation as factors in academic success were also considered.

These findings provided the rationale for the research questions that the research is addressing. The next chapter will outline the theoretical perspective on which this research is based, along with epistemological and ontological assumptions and detailed explanation of the research design.

Chapter 3 Methodology, research design and methods

3.1 Introduction

This chapter begins by stating the theoretical perspective adopted for this thesis, followed by the ontological assumptions and epistemological orientation. It then describes the case study approach, context and population from which the participants were selected and research questions to be addressed. This chapter also outlines the four phases of data collection undertaken, the methods used to collect and analyse the data, and how they address the research questions. The implications of being an insider researcher will then be explored. Finally, ethical considerations in planning the research design are described, including issues related to the credibility and quality of data collected.

3.2 Theoretical perspective, ontological assumptions and epistemological orientation

This research was founded on an interpretivist paradigm where human action is considered inherently meaningful. To attribute meaning to an action requires interpretation and understanding, and interpretive researchers assume that access to reality is only through shared constructions such as language and shared meanings. Therefore, reality is considered to be socially constructed and knowledge is based on meaning that is relative (time, context, culture and value bound). This is summed up in a quote by Denzin and Lincoln (2005):

‘Qualitative researchers stress the socially constructed nature of the reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry. Such researchers emphasize the value-laden nature of inquiry. They seek answers to questions that stress how social experience is created and given meaning’ (p8).

Consequently, the aim of this interpretive research was to advance knowledge by describing and interpreting the chosen phenomena (which was students' experiences of target setting) in an attempt to get shared meanings with others (Bassey 1999). Stake (1995) stated that '*most contemporary qualitative researchers hold that knowledge is constructed rather than discovered*' (p99), and emphasizing this construction of knowledge places the role of the researcher as that of an interpreter, with readers of the research also creating another layer of interpretation. In relation to the focus of this research, the target setting process that students experience is largely a quantitative one. Students are set targets and the college determines the success of the process in terms of student achievement, or not, of that target grade. Interpretivism can take a critical stance to the 'taken for granted' ways in which the world is understood (Burr 2015) and there was a concern that some institutions 'took for granted' a target setting policy which was founded on a shared understanding that a universal system suits all. Whilst acceptance of this shared understanding is largely unchallenged, this research attempted to go much deeper by understanding and adding meaning to the target setting process from the perspective of the student actually experiencing it. As Elliot et al. (1999) stated:

'the aim... is to understand and represent the experiences and actions of people as they encounter, engage and live through situations...to develop understanding of the phenomena under study, based as much on the perspective of those being studied (p216).

3.3 The main study and research questions

The following subsections explain and provide a rationale for a case study approach, the context and population, research design and sampling method, data collection methods employed and participants in order to address the following research questions:

- 1. What are student experiences of a target setting process?**
- 2. What academic behaviours and attributes are exhibited following the implementation of a target setting process?**
- 3. Are students who engage in the target setting process more likely to achieve their target grades?**

3.3.1 A case study approach

As the title of thesis research signifies, the approach taken in this research was that of a case study.

Merriam (1998) defined a case study as:

‘an intensive, holistic description and analysis of a bounded phenomenon such as a programme, an institution, a person, a process or a social unit’ (pxiii) and a case as ‘a thing, a single entity, a unit around which there are boundaries’ (p7).

Merriam (1998) stated that the defining characteristics of this approach are that it is particularistic (focusing on a particular situation, event, programme or phenomenon), descriptive (yielding a rich, thick description) and heuristic (illuminating the readers’ understanding of the phenomenon).

In terms of gathering data, case study researchers advocate the use of multiple sources from which to draw data in order to capture the complexity and entirety of the case, although there is variation in the type and recommended number of sources, depending on the epistemological perspective adopted by the case study researcher. For example, Merriam (1998) drew only on qualitative sources (interviews, observation and analysis of documents) in order to give meaning and make sense of the data through a variety of qualitative based analytical based techniques. Other researchers such as Bassey (1999) are less prescriptive about the type of sources and instead focus on the sufficiency of data that is collected in a natural context. He stated that:

‘an essential feature of the case study is that sufficient data are collected for researchers to be able to explore significant features of the case and to put forward interpretations for what is observed... and the study is conducted in its natural context’ (p47).

Many different types of case study have been identified by prominent case study authors such as Stake, Yin and Bassey. For example, Stake outlined three types of case study; intrinsic which is undertaken when the researcher requires a better understanding of a specific case; instrumental, if a particular case is examined to provide insight into an issue – the case is of secondary interest and facilitates understanding of something else; and collective case study studies which, as the name suggests, refers to a number of cases in order to investigate a phenomenon, population or general condition. Stake’s intrinsic case study can be likened to Yin’s descriptive and Bassey’s story telling

and picture-drawing case study definition. Bassey's (1999) 'picture-drawing' case study is a descriptive portrayal, drawing together the results of exploration and analysis of the case and this was determined as the appropriate type of case study to select in order to address the aims of this research and corresponding research questions. Hodkinson and Hodkinson (2001) described the many strengths of case study research which include promoting understanding of complex inter-relationships. They contended that one of the inherent features of a case study is that they operate with a very restricted focus which acts to facilitate the construction of in-depth, detailed understanding which can shed light on the complex interaction of variables. It is likely that the research questions stated above will reveal complex inter-relationships which further adds credence to the justification for a case study approach. Another strength, stated by Hodkinson and Hodkinson (2001), is that '*they retain more of the noise of real life than many other types of research*' (p3). Case studies are grounded in a lived reality, so strongly relate to the experiences of individuals, groups or organisations. Again, the research questions are exploring experiences which can be brought to life through a case study approach. They can also facilitate the unearthing and subsequent exploration of the unexpected, idiosyncratic and unusual. Sometimes unexpected and unusual cases are excluded from other forms of investigation which may focus more on common themes and patterns in the data. Case studies can also facilitate rich conceptual and theoretical development by examining existing theories against complex realities which, again, the research questions may trigger.

Research studies related to target setting have tended to follow two distinct pathways. Research has either involved the setting of targets and if those targets are then achieved, this is deemed to validate the target setting process. This can be regarded as a quantitative approach used by government organisations (e.g. OFSTED). As an alternative, a qualitative approach is taken whereby those involved in target setting processes are interviewed in order to understand their perceptions regarding how effective the process was (e.g. Waite et al. 2009). However, combining these two approaches using the same participants seems to have merit. It is contended that focusing on quantitative data is too simplistic in understanding how the process of target setting works as it does not explore individual differences or possible factors that impact on the effectiveness of the approach. Likewise, relying on qualitative methods may add such understanding, but it is proposed that more can be achieved by gathering both qualitative and quantitative data and considering them in conjunction with each other, but also acknowledging the wider context from which the

data have emerged. Therefore, in response to the perceived methodological limitations of the self-belief and target setting literature, this case study formed a detailed picture relating to students' experiences (including potential impact on self-belief and motivation) of the implementation of a college's target setting policy. It did so by drawing on both qualitative and quantitative data in relation to twelve participants, in order to provide greater understanding in relation to their experiences of target setting across an academic year.

Data were gained through a combination of semi-structured interviews and the analysis of relevant studentship documentation including attendance data, effort grades, homework grades, teacher feedback and target grades against both formative and summative assessment. Studentship documentation was stored on electronic learning plans for every learner and accessible by students, teachers, tutors and parents. Self-belief and motivation are psychological processes, so interviewing students to ask them about their perceptions relating to self-belief seemed to be the most suitable way to do this.

The research had synergy with a mixed methods approach, although was not deemed to be mixed methods research. Different phases used different methods of data collection, with Phase 1 employing a questionnaire to identify a potential sample and to derive conceptual ideas and Phase 2 involving interviewing students with their interview transcripts being analysed using these and other concepts. Phase 3 involved capturing and analysing individual studentship information while Phase 4 compared the individual student target grades to the actual grades they achieved. The research was founded on attempting to understand the experience of students engaged in the target setting process by drawing on theoretical constructs and it was not the intention to integrate the data obtained from both methods to generate knowledge or understanding. The data obtained from Phase 1 solely aided the selection of the purposive sample and this did not constitute mixed methods research, which was described by Turnbull and Lathlean (2015), with reference to other authors, as:

...placing together methods like 'pieces of a jigsaw' to create a more complete picture (Bryman et al. 2008 p264) or as having a multiplicative effect where mixed methods can generate a whole that is greater than the sum of its parts (Creswell 2010 p372).

3.3.2 Context, population and sampling

Bassey (1999) stated that an essential feature of a case study is that the study takes place in a natural context. The rationale for undertaking this educational doctorate was to explore a context that was relevant to professional practice, and having identified an issue that was considered as worthy to base an educational doctorate on, it was therefore most appropriate to conduct research within it. In terms of the college's context, it is located within southeast Wales in an affluent area on a single site. Despite its affluent location, the college is highly inclusive by being one of the most ethnically diverse college in Wales in 2017 and ranked fourth in terms of numbers of students who are categorised according to the Welsh Government as 'deprived'. The college attracts students aged 16-19 from over 40 institutions. Most learners are enrolled onto level 3 provision which predominately consists of A levels (64%), although there is some level 3 vocational provision in the form of BTEC qualifications which constituted 21% of all qualifications offered in 2016-17. The remaining 15% of the provision is aimed at level 2 students who are enrolled at the college with less than 5 GCSEs at grade C and above. In terms of academic outcomes, the college is considered as outstanding by Estyn which is the education and training inspectorate for Wales, established under the Education Act 1992 to inspect quality and standards in education and training in Wales.

Post 16 General Education qualifications in Wales include Advanced Subsidiary Levels (AS) and Advanced Levels (A). AS qualifications are taken at the end of the first year of study and contribute 40% to the Advanced level qualification which is gained after the second year of study. The population for this research comprised of students studying AS qualifications only. The rationale for this was based on the design of the research which intended to explore students' initial perceptions of being assigned targets, to collect data over the academic year and to compare the grade the student actually achieved with their target grade. Level 2 students (who are generally re-sit GCSE students) were excluded because Alps do not assign target grades for this level of qualification. A2 students were also excluded because it would be difficult to capture their initial perceptions of the targets they were assigned as this would have occurred over a year ago. Equally, Level 3 BTEC students were also excluded due to the qualification's coursework nature. Students with additional learning needs were also excluded. This was because the sample of students to be interviewed as part of the case study would be relatively small, so it would be difficult to take account of an additional factor such as students who required more educational support. Just over half of the

students at the college were female and just under half were male, so a balance of males and females was sought. One third of the population were also classified as deprived, so it was important to select a sampling method that would be able to take account of these variables which is explained in the next section.

The following table summarises the inclusion and exclusion criteria in selecting the sample:

Inclusion criteria	Explanation
Students studying AS qualifications	These student are new to the college and will be assigned target grades at the start of the academic year.
Deprived and non-deprived students	In order to be representative of the college population, deprived and non-deprived students will be selected.
Male and female students	In order to be representative of the college population, male and female students will be selected.
Exclusion criteria	
Students studying A2 qualifications	Phase 2 involves asking students about their initial perceptions of being assigned target grades. A2 students are in their second year of study so it would involve them trying to remember an experience that occurred a year ago.
Students studying Level 3 BTEC qualifications	A coursework based qualification so will be unable to capture formative assessment as part of Phase 3 of the research design.
Students studying level 2 qualifications	A coursework based qualification so will be unable to capture formative assessment as part of Phase 3 of the research design. In addition, Alps data is not available for this level of qualification.
Students with additional learning needs	The sample is small so it would be difficult to add another variable in conjunction with gender and deprivation.

Table 2: Inclusion and exclusion criteria in selecting a sample

3.4 An overview of the methodology

Figure 4 illustrates the methodology and research design whereby a relativist ontological approach has been adopted, with an interpretivism epistemology. The research design is that of a case study where participants have been interviewed and document analysis undertaken, in order to address the three research questions and derive inferences for educational practice.

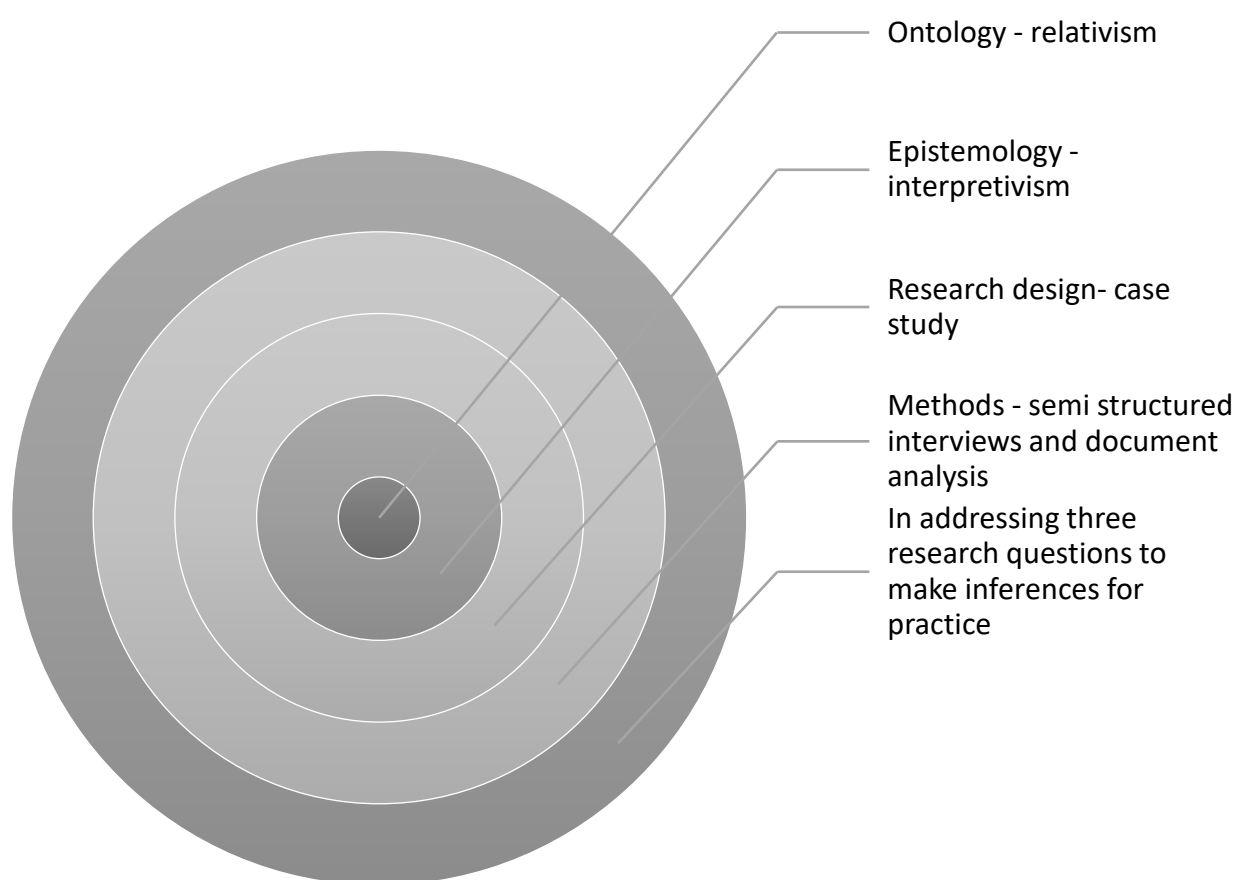


Figure 4: An overview of methodology and research design

As seen in the outer circle, a focus on inferences and future implications for students as a result of undertaking this research is perceived as important, as all educators wish to inspire students to continue on a learning journey. However, qualitative research does not concern itself with the

ability to generalize or prove validity and reliability, a perspective which was summed up by Merriam (1998) who stated:

‘The concepts of validity and reliability organized in nature sciences... were adopted by quantitative researchers in social sciences, so for qualitative researchers, applying data validation criteria into an inquiry which is conducted by researchers with opposing epistemological stances is something of a misfit’ (p206).

However, while Stake (1995) considered the use of case studies to be a poor basis for generalizations: ‘We do not study a case primarily to understand other cases’ (p4), he did advocate that it was possible to make assertions. Assertions are interpretations or conclusions which will often be located within the case study, but could possibly also refer to wider populations. However, he warned that when making assertions, the speculative and tentative nature should be made clear. Therefore, the outer ring of the diagram above indicates that this research will make inferences and conclusions should they occur; however, they are intended as tentative in order to further dialogue and ultimately an improvement in the understanding of the student experience.

3.5 The research design

The research was conducted in four phases as illustrated in Figure 5:

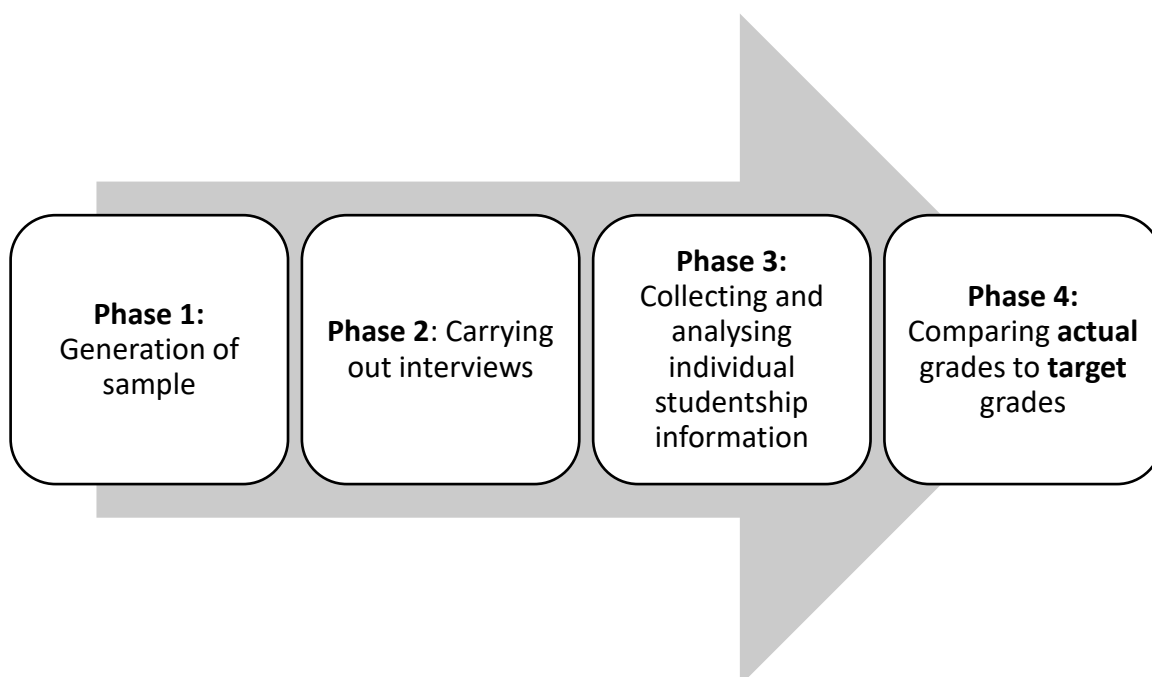


Figure 5: The four phases of the research design

Each of the phases will be now be discussed in turn.

Phase 1: Generation of sample

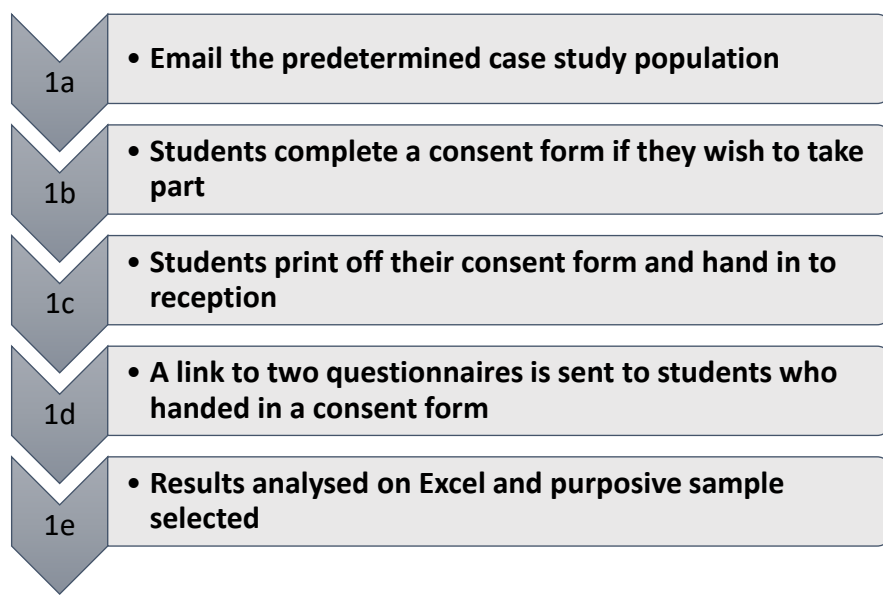


Figure 6: The process in generating the sample

Phase 1 and Figure 6 explain the main steps in generating the sample which was undertaken during the first term of the academic year. This first phase of the fieldwork involved asking all participants within the selected population to complete two questionnaires within a stated period. The population was the new intake of advanced level students following AS levels which constituted about 400 students. All participants were sent an email with a consent form attached and an electronic leaflet which explained the research more fully. If students were happy to take part, they printed off the consent form, signed it and handed it in to the college reception where the receptionist then placed these signed consent forms in a lockable drawer in a filing cabinet.

Once the deadline was met, those students who had completed and handed in a consent form were sent an email that contained two links to two questionnaires. One link was a self-efficacy questionnaire (based on Gaudiano and Herbert's 2013 self-efficacy scale) and the other link was a locus of control questionnaire (based on Trice's 1985 Academic LoC scale). On completion of these questionnaires, twelve participants were selected for interviews that took into account variables relating to gender and deprivation. A balance of males and females was sought as the college

population was made up of just over half of the students being female and just under half being male. In addition, one third of the population was classified as 'deprived', so this was also to be accounted for in the sample selected. This classification of deprived is based on the Welsh Government's methodology which is founded on household postcode. The most deprived postcodes are categorised as 1, followed by the next most deprived postcode which is categorised as 2 and so on until 4 which is described as least deprived. All other postcodes are considered as not deprived.

The aim of asking students to complete the questionnaires was to identify a purposive sample in order to complete the subsequent phases. This purposive sample consisted of three participants with a low score on the self-efficacy questionnaire, three participants with a high score on the self-efficacy questionnaire, three participants with a low score on the locus of control questionnaire and three participants with a high score on the locus of control questionnaire.

In terms of the actual process in generating the purposive sample, each questionnaire required students to identify their unique person identifier which is given to them on enrolment. Responses to each questionnaire were ranked from highest to lowest by extracting the results from QDP (the online questionnaire tool) in the form of a CSV file. A CSV file is a plain text file that stores tables and spreadsheet information. CSV files can be easily imported and exported using programs that store data in tables. Consequently, this file was then linked to the College's Management Information System (MIS) which can be seen in Table 3 below. This produced an Excel file that listed all the students (as represented by personal identifiers) who completed the questionnaire (column A) and their questionnaire score (column B). This information came from the CSV file which had been imported from QDP (the online questionnaire tool). The College's Management Information System was then able to produce column C (gender) and column D (deprivation) as a result of the personal identifier information in column A.

Two of these Excel files were generated as students had completed two questionnaires. Participants were then selected for interview on the basis of each file. This involved selecting three participants at the top end of each Excel file, and three at the bottom end of each Excel file in order to select participants who had responded to the questionnaires very differently, as determined by their questionnaire score. Deprivation and gender were also balanced by ensuring that participants were selected from different deprivation deciles and there was an equal mix of males and females in the sample of twelve that was ultimately generated.

Column A	Column B	Column C	Column D
Personal identifier	Result	Gender	Deprivation decile
E533456	39	M	1
D555567	39	M	2
D707432	37	F	3
C999875	12	M	4

Table 3: Extract of Excel file used to select purposive sample

Phase 2: Undertaking the interviews

Following the selection of the purposive sample participants, students were sent a second email with a consent form attached and an electronic leaflet which explained the second phase of the research more fully. If participants were happy to take part, again, they printed off the consent form, signed it and handed it into the college reception where the receptionist then placed these signed consent forms in a locked drawer in a filing cabinet. The interviews were conducted during the second term of the academic year. A mutually convenient time was arranged with each participant and the college's meeting room provided a venue. The researcher and participant sat in comfortable chairs arranged around a coffee table and two small dictaphones recorded the interview. Participants were asked at the start of the interview whether they were happy with the interview being recorded and the additional dictaphone acted as a back-up should the primary dictaphone fail. An overview of this process can be seen in Figure 7:

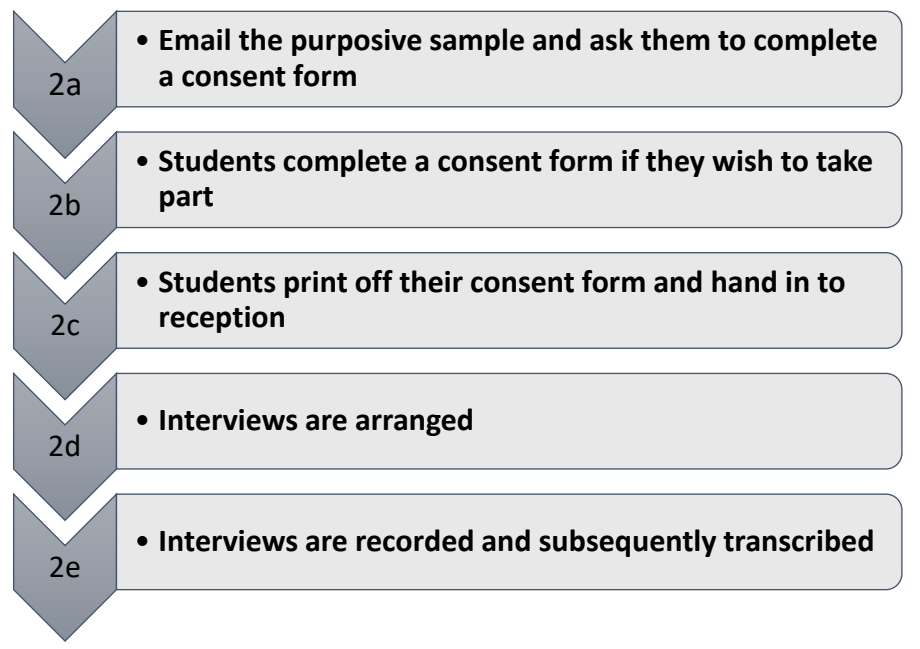


Figure 7: The process in carrying out interviews

Phase 3: Collecting and analysing individual studentship information

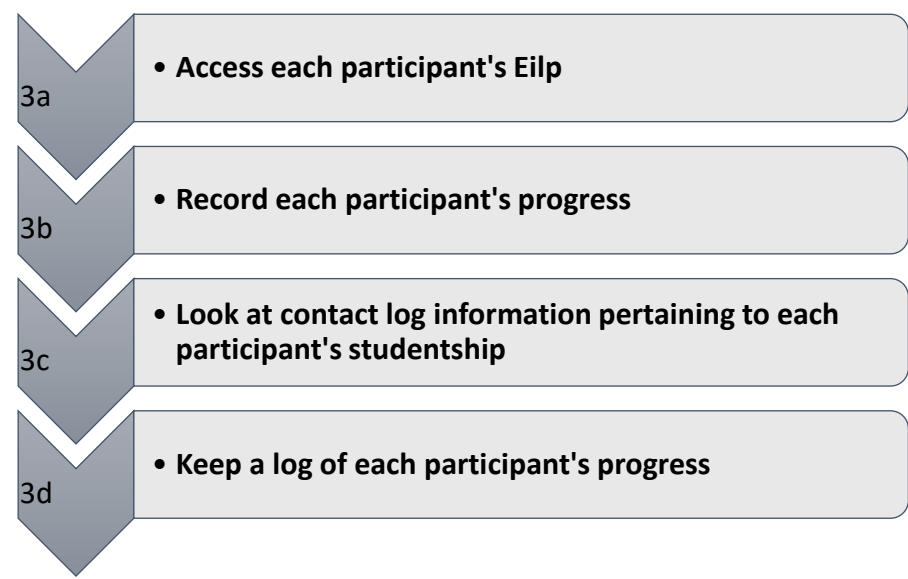


Figure 8: The process in collecting and analysing individual studentship information

During the academic year, information pertaining to each participant was also collected and this constituted the third phase of data collection as seen in Figure 8 above. This consisted of attendance, discipline, punctuality and individual formative assessment scores in relation to target

grades for every piece of work submitted for every subject. All of this information was available electronically and was stored on each student's electronic individual learning plan (Eilp) which was accessible to students, teachers and parents. Further, it contained information relating to teacher feedback, disciplinary issues, lateness, assignment grades, test results and exam results. This is a student's 'natural context' so it was an ideal source to draw on in conjunction with the data obtained from interviews.

Phase 4: Comparing actual grades to target grades

The final phase of data collection involved accessing each participants' actual grades achieved following results publication in August 2019. These grades were then added to the log of each participants' progress over the academic year, and these logs were considered in conjunction with the thematic analysis and led to content of the next chapter on Findings.

3.6 Participants

Details regarding the twelve participants that were purposely sampled can be seen in Figure 9 below. Pseudonyms have been given in order to protect anonymity.

Participants selected with internal locus of control

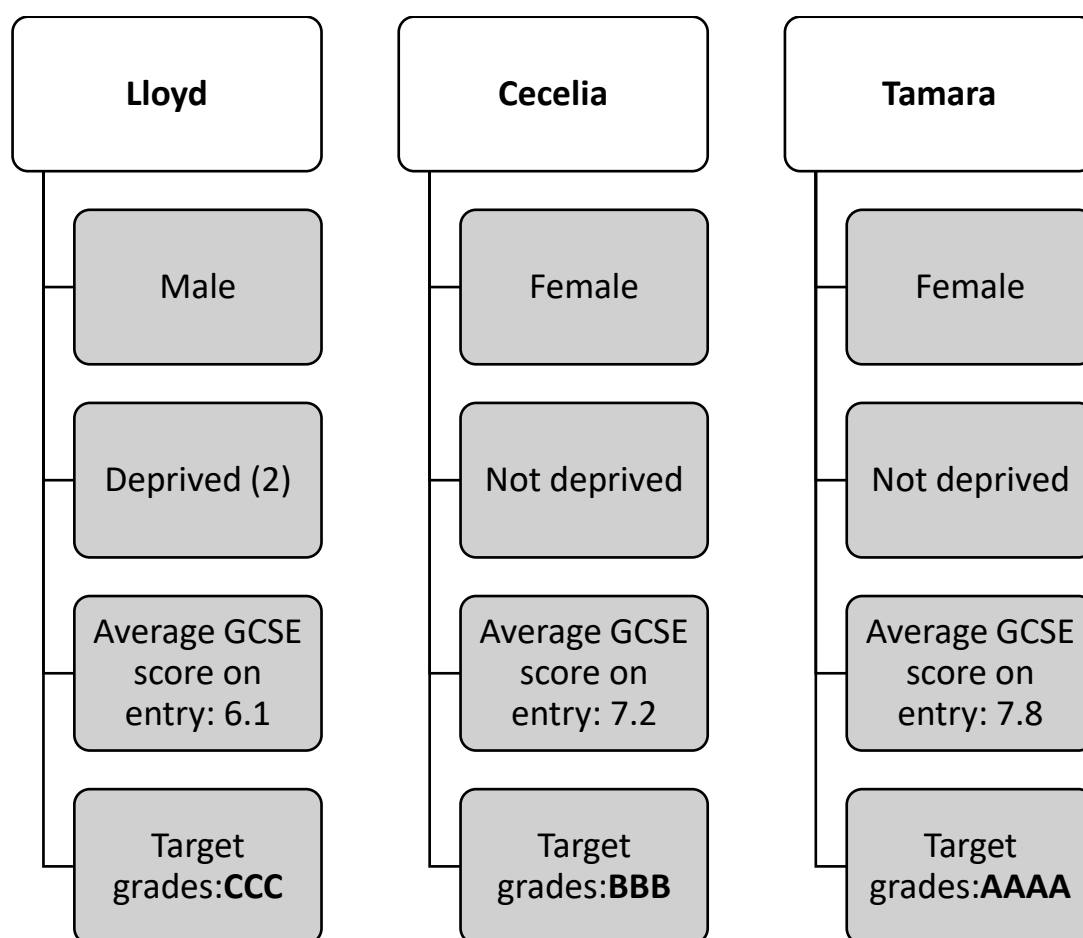


Figure 9: Participants with an internal locus of control

Figure 9 shows details of the participants categorised as having an internal locus of control. There were two females and one male in this grouping. The definition of deprivation is used by the Welsh Government and is based on household postcode which are ranked according to most deprived through to least deprived, and not deprived. Lloyd's postcode categorised him as the second most deprived participant in the sample. Tamara had the third highest average GCSE score on entry to the college with Lloyd having the second lowest average GCSE on entry.

Participants selected with external locus of control

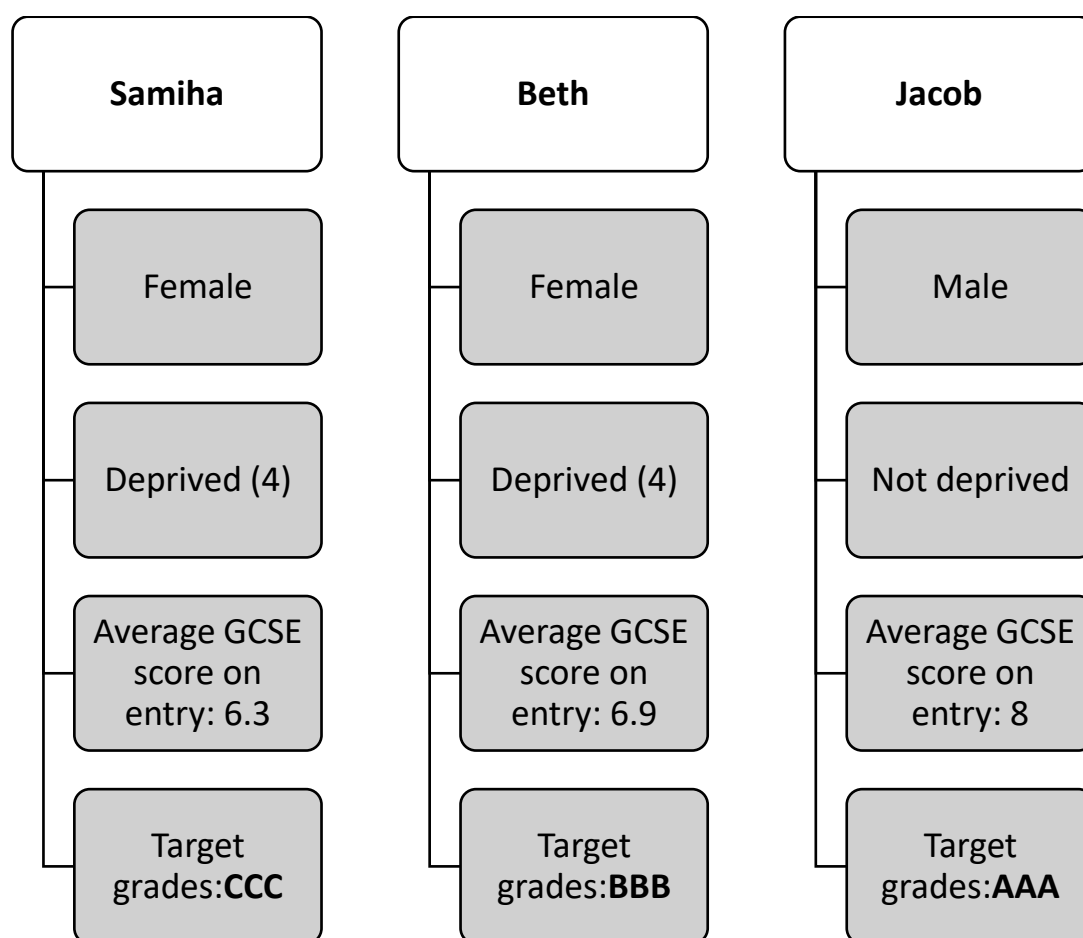


Figure 10: Participants with an external locus of control

Figure 10 shows details of the participants categorised as having an external locus of control. There were two females and one male in this grouping with two students classified as deprived (although a 4 denotes the lowest rating of deprivation, with a 1 indicating the highest level of deprivation). Jacob¹ had the second highest average GCSE score on entry to the college, with Samiha having the third lowest average GCSE score on entry to the college

¹ It should be noted that although Jacob was recruited and the interview was undertaken, he left the institution immediately after. As a result, he had to be withdrawn from the study, owing to incomplete data, and therefore he is not included in the presentation of the findings in Chapter 4.

Participants selected with high self-efficacy

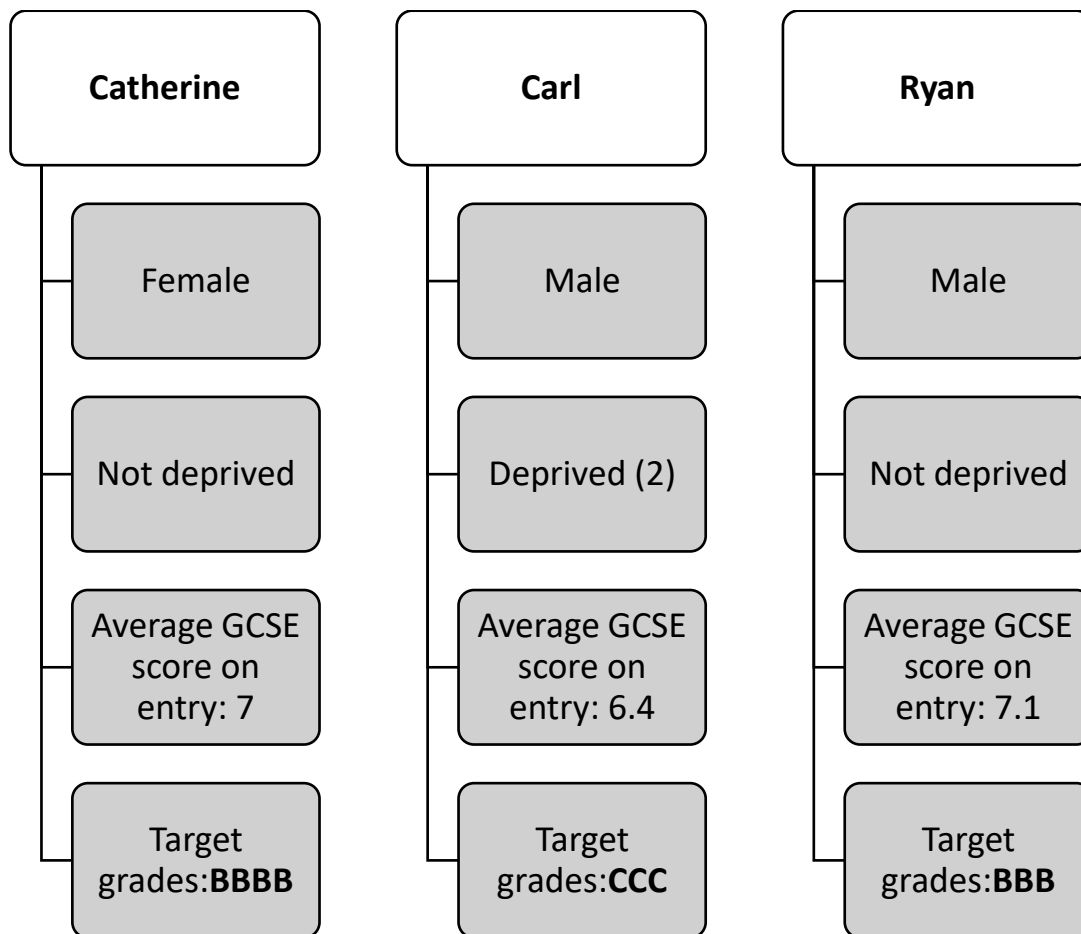


Figure 11: Participants with high self-efficacy

Figure 11 details the three participants selected who have been categorized as having high self-efficacy. There were two males and one female in this grouping. Carl is in the second highest category for deprivation.

Participants selected with low self-efficacy

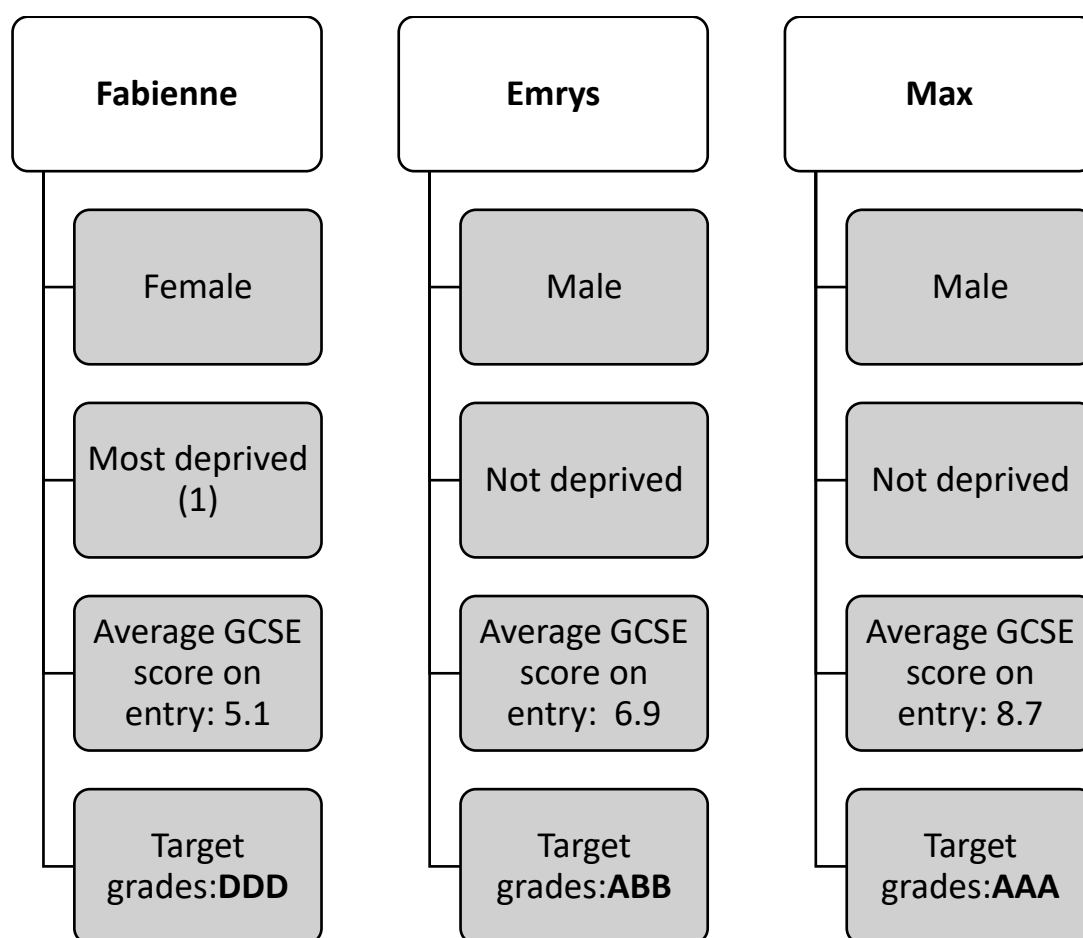


Figure 12: Participants with low self-efficacy

Figure 12 details the three participants selected who have been categorized as having low self-efficacy. Fabienne was the most deprived participant in the sample and also had the lowest average GCSE score. Contrastingly, Max had the highest average GCSE score on entry to the college.

3.7 Methods of data collection

Three methods were undertaken which included questionnaires, semi-structured interviews and documentation analysis. The questionnaires were used to select participants for the main study (purposive sampling), while the semi-structured interviews and documentation analysis were

methods utilised with the twelve participants selected as a result of purposive sampling. These methods will be described in detail below.

3.7.1 Questionnaires

As part of Phase 1 (see Figure 6: Phase 1 – the process in generating the sample), students were asked to complete two questionnaires. The questionnaires had been piloted as part of the initial study and feedback from participants raised a number of issues. These included a dissatisfaction with the number of questions posed. For the initial pilot locus of control questionnaire there were 34 questions and participants felt this was too many. Some participants stated that the meaning of the questions was not always clear. These comments led to consideration that a dichotomous type yes, no questionnaire may not be as appropriate because participants often take a more middle ground, so the original questionnaires were replaced with Likert scale based questionnaires that also had fewer questions. The new version of the self-efficacy questionnaire (see Appendix 4) had twelve questions and had a scale from 1 that indicated ‘not very like me’ to 5 that indicated ‘very like me’. The new version of the LoC questionnaire (see Appendix 3) had 15 questions with the options of Definitely, Probably and Disagree.

3.7.2 Semi-structured interviews

As part of Phase 2 of the data collection, semi structured interviews with the twelve participants then explored student experiences of target setting and were carried out in the first part of the second academic term (January – February). The interview was designed to explore the students’ perceptions, having experienced the target setting process, and their reflections of target setting as a motivational tool and their views regarding their studentship behaviours. The Interview Schedule (Appendix 9) was developed as a result of themes that emerged from the literature review and the feedback following the initial study identified that the initial Interview Schedule should be amended. The rationale for amending the Interview Schedule was based on the fact that one participant was able to talk at length, whereas, it was much harder to elicit responses from another

using the existing Interview Schedule. More thought was also needed in terms of areas of focus. For example, ownership, motivation and feelings/attributes were tentative themes raised and it was felt that the Interview Schedule needed to reflect these areas more explicitly in terms of the questions posed. The initial questions also focused more on the students' perceptions of the target setting process as opposed to their actual experiences so this was also amended. In addition, in regularly revisiting and adding to the literature review, further key concepts relating to self-belief were identified such as self-regulation and resilience, so it seemed logical to include some questions relating to these.

3.7.3 Thematic analysis

Once the interviews had been transcribed by the researcher, the content was systematically analysed. Braun and Clarke (2006) stated that '*analysis requires the active and systematic engagement of the researcher with the data*' (p85). They also distinguished between 'small q' and 'Big Q' analysis where small q analysis uses quantitative techniques within a generally quantitative framework, while Big Q analysis sits within a qualitative framework that emphasises contextualised understanding and rejects the notion of objective reality or universal truths. In line with the epistemological and ontological foundations of this research, Big Q thematic analysis was undertaken. The stages of this analysis can be seen in Figure 13.

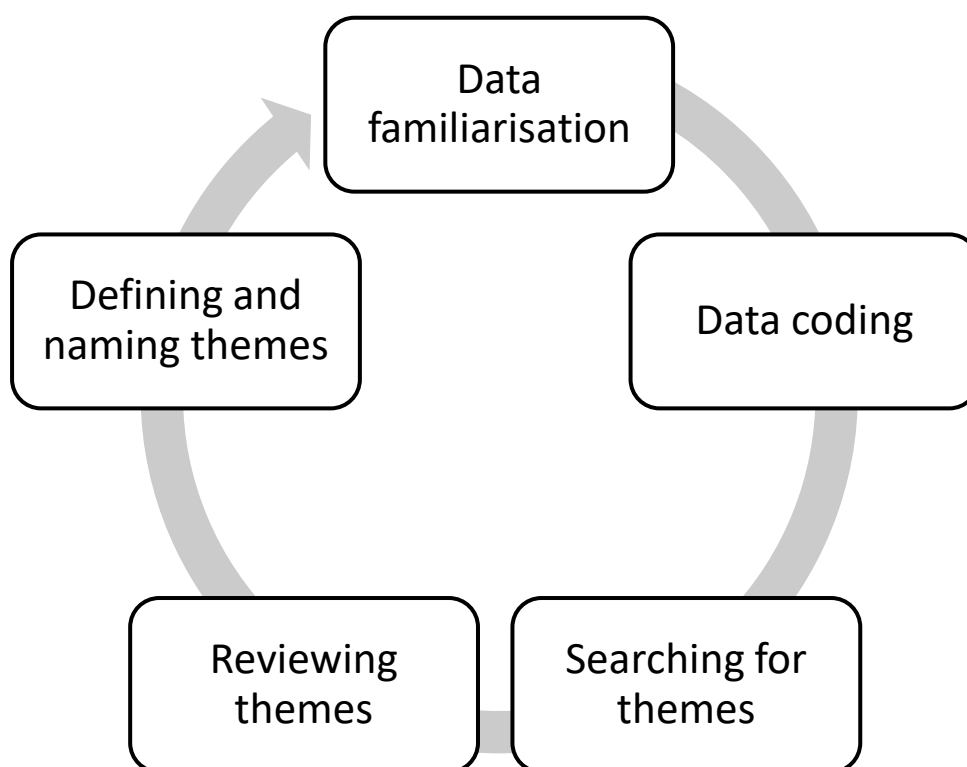


Figure 13: Stages of thematic analysis

The first stage of data familiarisation involved immersion into the collected data. It involved reading and re-reading to get a feel for the data and trying to get an initial overview of the data. Transcripts had been typed up with two columns next to each line of transcript, and the first column was entitled 'notes of interest' and involved making notes against any text that stood out. The second phase of data coding built upon and elaborated the first phase of coding and involved turning the notes of interest column (and going back to the original text) into a word or short phrase in order to start to capture the researcher's interpretation of the data. These words and short phrases were then entered into the second column and to prevent coding drift, the entire transcripts were coded on multiple occasions. Stage 2 involved taking an A3 sheet of paper and trying to create a spider diagram of all the codes (a thematic map), by clustering similar codes together, creating sub codes and seeing beyond these codes in order to glean themes which represented the specific codes and sub codes. There were many thematic maps created to search for themes which best represented a plausible and coherent interpretation of the data, with previous stages often returned to. Once the

overarching themes were decided upon, some of their names were changed and a detailed analysis of the data in each of them was developed as seen in Chapters 4 and 5.

3.7.4 Document analysis

During the academic year, information pertaining to each participant was also collected as described in Phase 3, Figure 8: The process of collecting and analysing individual studentship information. This consisted of comparing target grade and actual grade attainment for each piece of formative assessment carried out, along with analysis of studentship indicators. Studentship indicators included:

- Attendance: If the student was absent for three consecutive lessons or more without sound reason, or had failed to attend 80% of lessons in the three-week period.
- Punctuality: If the student was repeatedly late for lessons and a pattern of behaviour had emerged.
- Assignment completion: If the student failed to submit work by a deadline and/or a subsequent negotiation of a deadline.
- Behaviour: Students were expected to behave in a manner consistent with the ethos and mission of the College, their membership of the College, and with their status within it. If their behaviour was deemed unsatisfactory, they would be issued with a 'notice of concern'.

This information forms what is known by the college as an Eilp (Electronic individual learning plan). All of this information was available electronically and is accessible to students, teachers and parents. An example of an Eilp can be seen in Figure 14 below:

Progress



Course	Target Grade	Achievement Grade	Attendance
GCE AS Biology	B	D	88
	Induction assignment Microbiology and populations Investigation into dehydrogenase activity – How temperature affects dehydrogenase activity.		C D D
GCE AS Chemistry	B	C	86
	Summer holiday assignment – Organic chemistry questions A201 Electrochemistry – Electrochemistry questions Bestchoice 3.1 Redox – online questions		C C D
GCE AS Politics	B	D	92
	Induction assignment Unit 3 – Liberalism booklet Assessment 1 – Why is the concept of pluralism an essential value of liberalism?		B D E
Pastoral and Spiritual Reflection			96
Welsh Baccalaureate			88

Figure 14: An example of a student's Electronic individual learning plan

3.8 Being in insider researcher

Insider research was defined by Brannick and Coghlan (2007) as:

Research by complete members of organizational systems in and on their own organizations (p59).

This research can be described as insider research, given I conducted the study within the college in which I worked. There are perceived strengths and weaknesses in undertaking insider research with one of the main justifications being based on ease of access. Like many researchers undertaking Doctorates in Education, such a course is of a part time nature and a regular job is usually pursued concurrently. Therefore, from a practical perspective, the educational institution where I was based became the research site since there was no additional travelling involved and greater flexibility with regard to interview times and access to documentation, for example. Similarly, the ease of access and familiarity of the organisation led to the impetus to undertake the research itself as described in Chapter 1, section 1.3, so being based in an educational establishment directly led to topic on which this research is founded. However, as an insider researcher I needed to be cognisant of possible preconceived beliefs and ideas and the impact that I might have on participants who knew I was a senior member of staff in the organisation. Hockey (1993) contended that insiders are able to '*blend into situations, making them less likely to alter the research setting*' (p204) whilst Hawkins (1990) maintained that the researcher who continues to perform their role within an institution is far more likely to have an impact on the research (for the reasons mentioned above) in comparison to an outsider. Certainly, as an insider researcher, I understood the social setting and context, and possessed a heightened familiarity that led me to devise the research design which I believed best addressed the research questions. Furthermore, it helped me to decide what questions to ask and what documentation to analyse, precisely due to this heightened familiarity. Nevertheless, despite these clear benefits, I was also mindful in addressing perceived limitations with insider research including issues related to verisimilitude, sensitivity in reporting findings and informant bias and reciprocity.

Much research has suggested that when carrying out insider research, there is a danger in taking things for granted and to assume the perspective held by the researcher is more widespread than actually may be the case. Obvious questions may be missed or purposefully ignored if they are considered too sensitive (especially if the findings are being reported back to the institution) which may also lead to assumptions not being challenged (Hockey 1993; Brekhus 1998; Kanuha 2000). I was constantly aware of these issues and took steps throughout the research to overcome them. The topic of target setting was selected as a result of the commonly held assumption that the positive benefits to target setting may not necessarily be appropriate for all students. I sought to ask questions about target setting policy, procedures and student experiences which had not been

asked before. In addition, the college principal was fully briefed as to the nature of the research so was prepared to take on board the findings, even if they were not wholly supportive of existing practice.

Being an insider researcher can also impact on the credibility, rapport and actual dialogue in capturing information from participants. Hockey (1993) suggested that insider researchers are able to endanger a greater level of candour during interviews, for example, and as result of the greater trust and confidence that arises from the interviewer knowing the interviewee, they are more likely to gather thicker descriptions. However, the contrast can also be argued where Shah (2004) maintained that people may be wary of sharing information with an insider because they are worried they may be judged. Other researchers claim that interviewees are less likely to share thick descriptions with their interviewer because it is simply easier to do this with a detached outsider (Dimmock 2005). Mercer (2007) referred to this dilemma as a 'double edged sword', so if one accepts this description, the researcher needs to recognise the potential strengths and weaknesses and ensure there are mitigating factors.

One such concern can be informant bias which Drever (1995) defined as '*people's willingness to talk to you, and what people say to you, is influenced by who they think you are* (p31)'. Clearly, this was a significant issue to address, because I was a member of the senior leadership team and students may have been less prepared to say what they really thought. This reticence could have been borne out of a reluctance to be critical of established processes or not wanting to elaborate on issues relating to studentship, like low attendance, low assignment submission and a lack of effort, for fear of reprimand. The literature suggests that there is no 'perfect' solution to informant bias, where some researchers contend that interviewees may unconsciously or consciously confirm the stereotypes that they perceive the interviewer to hold and be less likely to express their own attitudes and feelings. In contrast, Preedy and Riches (1988) argued that interviewees may feel they cannot temper the truth as some information may already be known by the interviewer and pragmatism may simply outweigh candour in that the interviewee may see the interviewer again and may be uncomfortable in responding without honesty or transparency.

The latter perspective was particularly helpful in enabling me to reconcile this difficulty which also became the focus of the initial study, as explained in the next section. The key consideration was whether my status of both an insider and a member of the senior leadership team was going to impact on the research process. There were many ways in which the research design attempted to

mitigate against informant bias and the unequal power relationship. Some researchers advocate a highly structured interview approach where interviewers do not deviate at all from the exact wording and order of the questions to be asked. However, in an attempt to establish rapport with the students, a semi structured interview design was selected in order to elicit a more conversational and interactive dialogue that was intended to help put the student more at ease. In addition, to further encourage students to speak about their experiences, I answered any questions posed and shared experiences, where appropriate, to engender trust, thereby adopting an empathetic approach to the interview. Oakley (1981, p311) concluded that interviewing should be 'a two-way street' where the interviewer should attempt to make the interview a two-way flow, and in so doing should give something back, so where appropriate, I was mindful of this when conducting the interviews. The next section describes the outcome of the initial study which included trialling this interview approach as a means of addressing the perceived limitations associated with insider research.

3.9 The initial study

The main purpose of the initial study was to trial two measures, Instrument 1 and Instrument 2 with 6 participants. Instrument 1 was Nowicki and Strickland's (1973) Locus of Control scale for children and Instrument 2 was an Interview Schedule. Whilst the initial trial was intended to test methods which could be employed in the main study, it actually led to a significant change in the methodological positioning of this research. At the outset of the research, a pragmatic worldview and a mixed methods research design was proposed, which involved two hypotheses and a research question being posed and the use of an initial study to try out methods in an attempt to address these hypotheses and research question. The hypotheses and research questions were:

Hypothesis 1: Learners with an internal locus of control will be associated with a greater likelihood of achieving their target grades.

Hypothesis 2: Learners with an internal locus of control in conjunction with a high GCSE profile will be associated with the greatest likelihood of achieving their target grades.

Research question 3: How do factors relating to antecedents of self-belief influence the propensity of learners to engage in target setting?

The hypotheses were based on the likelihood of students achieving their target grades as a result of their locus of control position and GCSE grade profile and in addressing these hypotheses, Instrument 1 - an online closed question survey - was selected. Following a literature review, this was found to be the principal method employed by the majority of locus of control research studies in identifying an individual's position on the locus of control continuum. The literature review also elucidated that target setting research is often based on the use of interviews with open questions, so the initial study aimed to test a scale to determine an individual's locus of control and then to ask the same individuals questions using a semi structured Interview Schedule to promote additional understanding. This semi structured Interview Schedule was Instrument 2. I did have a concern, however, as described in section 3.8, that my insider research positioning could have impacted on the research design, so the initial 'pilot' also aimed to try out an Interview Schedule to see if students were conducive to answering questions.

The rationale for this design was based on research identified in the literature review related to target setting and the locus of control which had tended to follow two distinct pathways. Locus of control research almost always uses a quantitative based scale so it was proposed that to add further insight into how the locus of control interacts in the target setting process, interviews could be used to obtain a greater depth of understanding. Combining these two approaches using the same participants has not apparently been undertaken as a research project in this field before and it was contended that simply focusing on quantitatively derived data was too simplistic in understanding how the process of target setting worked as it did not explore individual differences that may have influenced the effectiveness of the approach. Likewise, relying on qualitative methods may add such understanding, but it was proposed that more understanding could be achieved in gathering both qualitative and quantitative data.

In the event, the findings and extensive reflection from undertaking the initial study proved important and instrumental in establishing the most appropriate and, indeed, modified design for the main study. The feedback from Instrument 1 revealed a total of 13 questions (38%) generated the same answer with each participant. This suggested that diversity of responses was lacking. Furthermore, feedback from participants also raised an issue with the number of questions. There were 34 questions in total and participants felt this was too many.

Some participants stated that the meaning of the questions was not always clear. Specifically:

Q18: Two participants asked whether the term stronger referred to physical strength or mental strength.

Q31: This question asked 'Most of the time, do you find it useless to try and get your own way at home?' One participant stated that 'most of the time' was difficult to quantify as it depended on what they were trying to get their own way about.

Q34: One participant was unsure of what 'get friends to do what you want' meant.

Q25: One participant asked what 'how you act' meant.

The comments relating to Q31 led to considering whether a Likert-based scale as opposed to Yes/No answers would be more appropriate and this, in fact, was later adopted in the main study, along with a questionnaire that had fewer questions. In addition, reviewing relevant literature was a consistent feature and a body of research was discovered that focused on both the locus of control and self-efficacy, with some research regarding these two constructs as highly related and intrinsic to the role of self-belief. This led to an additional questionnaire relating to self-efficacy to be completed alongside the locus of control questionnaire. Again, the self-efficacy questionnaire that was selected used a Likert scale as opposed to Yes/No answers and had fewer questions.

In terms of trialling Instrument 2, the initial study also identified that the Interview Schedule needed to be amended. This rationale was based on the fact that some participants were able to talk at length, whereas, it was much harder to elicit responses from other participants using the existing Interview Schedule. One participant was able to answer my questions with a 'yes' or 'no' so this needed to be addressed as the findings would be too thin. The questions also did not seem to encourage students to talk about their experiences and thoughts enough and one participant found some of the questions difficult to answer. For example, two questions asked 'How do you go about setting yourself goals? Can you give an example?' and 'What do you think about the target setting process? How does it work for you? One participant was unable to answer as they did not understand the questions. This did not contribute to the conversational dialogue that was intended, so the questions needed much more thought especially in terms of accessibility. Additionally, more thought was needed in terms of areas of focus. For example, self-efficacy, self-regulation, ownership, motivation, resilience and feelings/attributes were tentative themes raised, which it

was felt would be valid areas to explore so the Interview Schedule needed to reflect these areas more in terms of the questions posed.

The impact of the initial study was considerable in terms of the decisions then taken in the main study. This was not simply in relation to the methods used, but also regarding the epistemological and ontological footings. The pursuit for deep understanding of the student experience of target setting came to the forefront. As a result of trialling research Instrument 1, it became apparent that the data generated revealed how participants had responded to a questionnaire and, while research Instrument 2 attempted to glean more qualitative data, it still was not sufficient to gain deep understanding. This was when the decision to draw on other sources pertinent to the students' environment became part of the research design and additional research design phases were added that involved analysing individual studentship documentation and comparing overall achievement grades to target grades. Testing out hypotheses and obtaining data to reject or not reject them was no longer the goal; rather it was to attribute meaning and understanding to student action that was time, context and culture bound. As a result, the research questions were reformulated in order to reflect this different emphasis and methods revisited to ensure they synergised with the new research questions.

3.10 Ethical considerations

The main study was approved by The Open University Human Research Ethics Committee (HREC). BERA ethical guidelines for educational research (BERA 2011) informed the content of the emails which were going to be used to recruit participants, the consent forms, information leaflets explaining the purpose and nature of the research, the Interview Schedule and corresponding interviewing arrangements and data storage. In completing the HREC Application Form, three risks in undertaking the research were identified and ways to mitigate these risks was considered and ultimately approved by the Committee. The main risk identified concerned a power imbalance between myself as the researcher: (I am a member of the senior leadership team at the college) and students and, as a possible consequence of this power balance, the access that I as a senior leader had to data pertaining to students. Student participation in educational research activities led by lecturers is widespread, but it is a relationship that could potentially compromise the

voluntary character of the students' decision to become involved in the research. Typically, such a relationship involves unequal status, where one party has a position of influence or authority over the other. Students, for example, may volunteer to participate in the belief that doing so will place them in a (more) favourable situation with the teacher undertaking the research activity, which could ultimately lead to better grades or good references. In contrast, they may also believe that if they do not take part, this will negatively affect their relationship with the teacher.

In terms of mitigating this risk in recruiting potential students to take part in the research by completing the questionnaires, the following statement in bold was included in an email:

Dear student,

I would like to invite you to take part in completing 2 short questionnaires which form part of research which is being undertaken independently of XXXX for an Education Doctorate. **You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Also, information collected will be entirely anonymous.**

Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the attached leaflet carefully and ask me if there is anything that is not clear or if you would like more information.

If you would like to contribute to the research, please print off the attached consent and sign/date it. Then hand the consent form into reception. The deadline for handing in the consent form is 1st November 2019. Once the signed and dated consent form is received, you will be emailed the questionnaire links for your completion.

Furthermore, it was emphasised that while students may have recognised me professionally as a member of staff, I did not know any students as I did not work directly with students on a day to day basis. However, some students may have recognised my name through previous email correspondence with students since my job role included the implementation of a Student Experience Framework which aimed to promote learner voice and feedback. Many surveys are undertaken across the academic year, and students may have already responded to opportunities to share their opinions. Nevertheless, care was taken to distance myself from this role for the purposes of the research, albeit that it was an aspect of this part of my job that stimulated my interest in undertaking the research in the first instance.

In terms of addressing the power imbalance when conducting interviews, a similar approach was taken.

Dear student,

I would like to invite you to participate in an interview which forms part of research which is being undertaken independently of XXXXXXXX for an Education Doctorate. **You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Also, information collected will be entirely anonymous.**

Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the attached leaflet carefully and ask me if there is anything that is not clear or if you would like more information.

If you would like to contribute to the research, please print off the attached consent and sign/date it. Then hand the consent form into reception. The deadline for handing in the consent form is 31st January 2019.

An attempt was made to minimise the unequal relationship whilst conducting the interviews. A relaxed atmosphere was created prior to embarking on the data collection. This involved having an informal chat at the beginning of the interview and ensuring that participants understood that the data collection process was not a 'test' in any sense, and that all responses were equally acceptable, valid and welcomed. I also dressed informally and used informal chairs situated around a coffee table.

A major concern was considered regarding access that I, as the researcher, may have had to sensitive personal data (e.g. 'deprivation status') about the students and the necessity to guard against the consequences of having privileged access to these data. Of particular note was that I was able to use my employee status to check on attendance rates and deprivation markers by using student ID numbers and could look at specific assignments (including tutor comments). This may have potentially been deemed as 'crossing the lines'. However, all members of staff have access to each student's Electronic individual learning plan (Eilp) as the college advocates a transparent approach which contains this information. Furthermore, parents and guardians have a parent portal which enables them to access their child's work, attendance data, formative grades and teacher feedback, so this was not actually 'privileged access' as a consequence of the researcher's position within the college.

Another potential risk concerned not getting enough participants to complete the online questionnaires who met the selection criteria for the subsequent interviews. The research design involved selecting those who generated high scores and those who generated low scores. The initial study suggested that students were willing to participate in surveys due to the healthy response rate, and this was substantiated in the main study. Students within the college were generally keen to participate in questionnaires/surveys so a large number of participants took part in the main study questionnaire (317) which promoted a range of scores. Lastly, a final possible risk was that when students added up their score, a low self-efficacy score may have precipitated depression or at least feelings of low self-esteem. To mitigate this risk, if a student wished to seek help, contact details of the college's Wellbeing & Safeguarding Officers were included along with stating that students should also see their personal tutor, located in the personal tutor's base room.

This section has described the reflexive process in the development of the research process to ensure it mitigated the concerns with insider research and was ethically sound. The next section describes reflexivity, credibility and quality issues as data collection was being planned, captured and analysed.

3.11 Reflexivity, credibility and quality issues

A qualitative researcher's interpretive framework (theoretical commitments, personal understanding and personal experiences) will shape the data that are generated, the analysis of the data and outcomes. In order to increase the transparency of this research, I maintained a research journal that captured thoughts relating to reasons for selecting the topic, personal experiences relating to the topic, literature read, research design, data collected and analysis of the data. This allowed an appreciation and understanding of how this interpretive framework influenced the research process and outcomes and will be discussed in greater depth in Chapter 6.

The researcher's interpretive framework can influence the research, both positively and negatively. In this respect, Elliot et al. (1999) developed two sets of criteria that research could be judged against. The first set of criteria is applicable to both qualitative and quantitative research where all researchers should be explicit regarding their context and purpose, select appropriate methods and

fully describe these methods whilst maintaining respect for participants throughout. They should also ensure discussion is appropriate, there is clarity in presentation and that the research actually contributes to knowledge. This research has endeavoured to ensure it has responded to all of these requirements.

Elliott et al. (1999) also identified criteria that are especially pertinent to qualitative research, as illustrated in Figure 15:

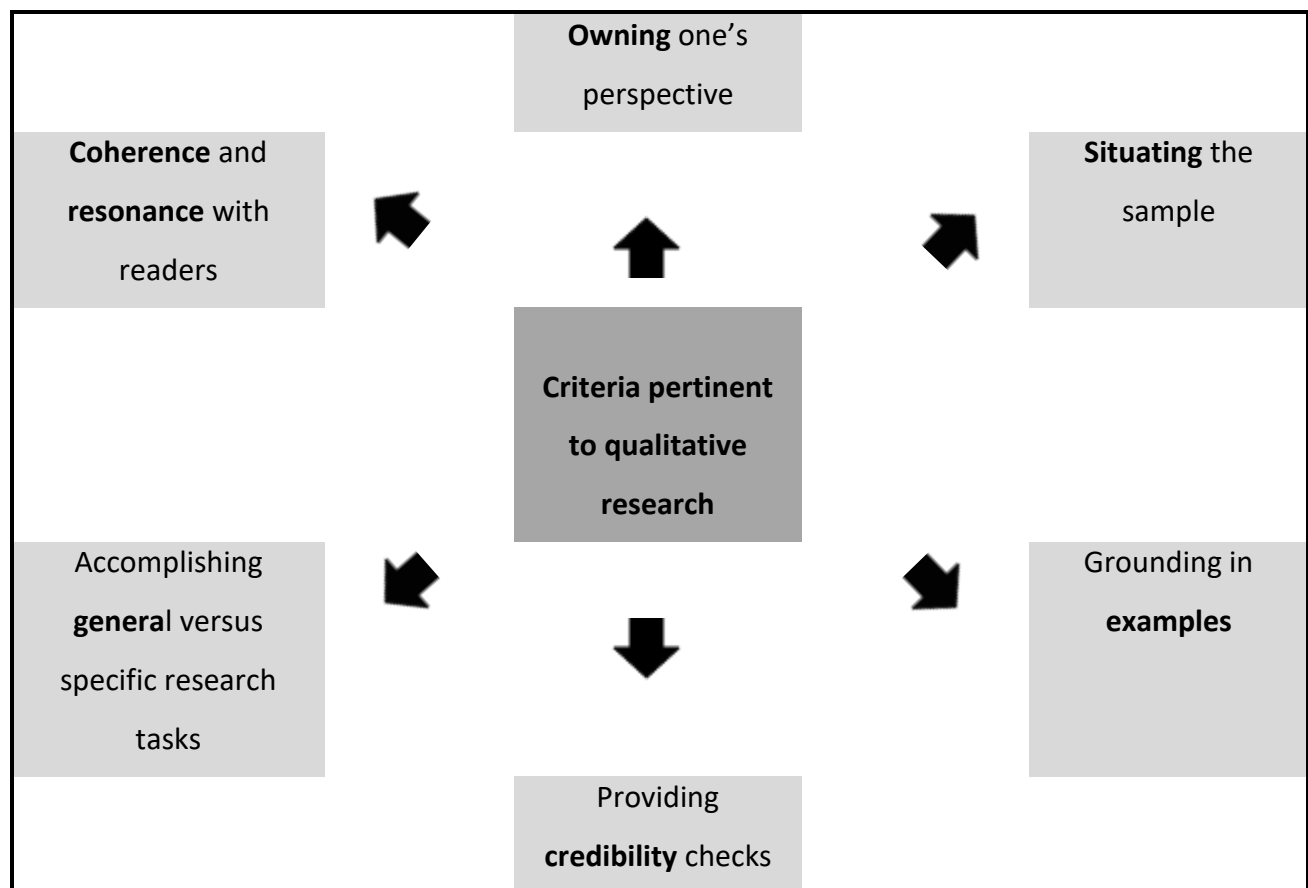


Figure 15: Criteria pertinent to qualitative research

These criteria were particularly instrumental in shaping this research. The use of a research journal was, in part, in response to Elliot et al.'s (1999) 'owning own perspective' criterion, whereby they emphasized the need for qualitative researchers to recognize their values, interests and assumptions and the role these play in their analysis and outcomes. In terms of situating the sample, Elliot et al. (1999) contended that researchers should describe their participants and their life circumstances (such as age, gender and social class) and this information was provided in Section 3.6 and through the vignettes described in the Findings chapter. Including vignettes was

also in response to the need to provide specific examples of the data to illustrate both the analytic procedures and the understanding developed as a result of these analytic procedures. Elliot et al. (1999) also advocated checking the credibility of accounts and/or themes and this partially led to expanding the data collection methods to include documentation analysis and the analysis of actual grades achieved. This additional method would act as triangulation with 'external factors' (actual grades achieved) which they identified as good practice. Achieving coherence was also very important and considerable time was spent making sense of the substantial data that case study research generates, so that it was possible to provide understanding that preserved nuances, but also fitted together to tell a story that was embedded in data. Finally, they advocated that narratives should bring to life the participants' experiences which resulted in the way in which the findings are presented in Chapter 4.

3.12 Conclusion

This chapter has described the methodology of this research. The Literature Review (Chapter 2) helped focus the purpose of this research and the research design. An interpretivist stance has been taken that advocates a relativist perspective. A case study approach has been adopted as this was regarded as the most suitable design to address the research questions. Questionnaires were used to select a purposive sample of twelve participants and these participants took part in semi-structured interviews and well as having documentation unique to them analysed. Thematic analysis of the transcripts was undertaken, and Elliot et al.'s (1999) guidelines for carrying out effective qualitative research were carefully considered and acted upon. The next chapter presents the Findings as a result of the research design.

Chapter 4 Findings

4.1 Introduction

A total of twelve participants were interviewed and the studentship documentation of eleven participants was examined over the academic year. As explained in Chapter 3 (section 3.6), one participant (Jacob) undertook the interview but left the college immediately after. As a result, he was deemed withdrawn from the study, owing to an incomplete data set and, therefore, this chapter presents the findings from eleven participants.

The experiences of the participants have been compared and contrasted, and similar experiences have been amalgamated in order to address the following research questions:

1. **What are student experiences of a target setting process?**
2. **What academic behaviours and attributes are exhibited following the implementation of a target setting process?**
3. **Are students who engage in the target setting process more likely to achieve their target grades?**

During the interviews, students were asked questions about their perceptions and experiences which were then transcribed and subject to a subsequent systematic thematic analysis as detailed in Section 3.7.3. As a result of the analysis two overarching themes were derived which can be seen in Figure 16 below:

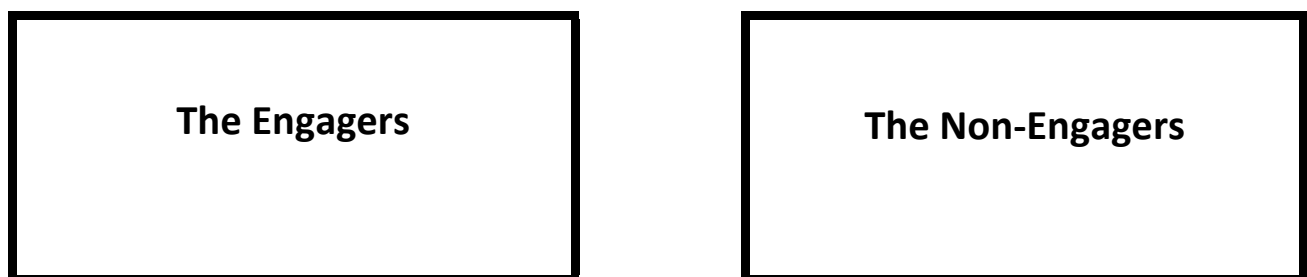


Figure 16: Grouping of students according to their reactions to allocated targets

The next section will begin by describing the students' initial experiences of being assigned target grades. These two overarching themes will be explained and distinguished between, along with depicting four specific subsets that emerged from these two overarching themes. The four subsets represent the further grouping of students in order to describe their similar perceptions of target setting along with their shared academic attitudes and behaviours and will be outlined in turn. Each of the four narratives will also be supported by vignettes of specific participant experiences in attempt to bring these experiences to life.

4.2 The generation and assignment of target grades

At the beginning of the academic year, each student reported being given a target grade for each subject that they were studying at the college. These grades had been calculated by an external organisation called 'Alps' who generate minimum expected grades based on every student's unique GCSE profile. Alps uses the previous year's results, which is a national dataset provided by the UK's Awarding Bodies, and predicts what a student should achieve with the same GCSE results. In order for the target grades to be aspirational, Alps rank the distribution set and generate targets based on the top quartile of the national dataset which are then assigned to individual students. Their website claims that:

'We believe every student deserves every chance of reaching their full potential. Alps give each student a 'realistic but aspirational' target based on their level of ability, not their background. Our benchmarks are based on the national dataset and setting .. [targets] at the equivalent of the top 25% is aspirational but achievable and is proven to drive up outcomes for students'.

From the students' experiences, there was also no consistent approach within the college in communicating target grades to them; students reported that some staff used stickers which were affixed to the front of their exercise books, while other participants engaged in one to one dialogue with their teachers, or were provided with assessment sheets with their specific target grades on. All students agreed that target grades were available on their Electronic individual learning plans and they were given guidance regarding a self-regularity process which they were expected to follow. This process involved comparing their target grade to their achievement grade for every

piece of formative work set. Where there was a negative variance, most students stated that they were expected to plan what they needed to do to improve, which may have involved setting action points or resubmitting work following amendments. The next section describes the themes identified as a result of students' reactions to being assigned their target grades.

4.3 Making a distinction between Engagers and Non-Engagers

Following thematic analysis, all participants could be described as either '**Engagers**' or '**Non-Engagers**' and were then further categorised into four sub-groups as illustrated in Figure 17:

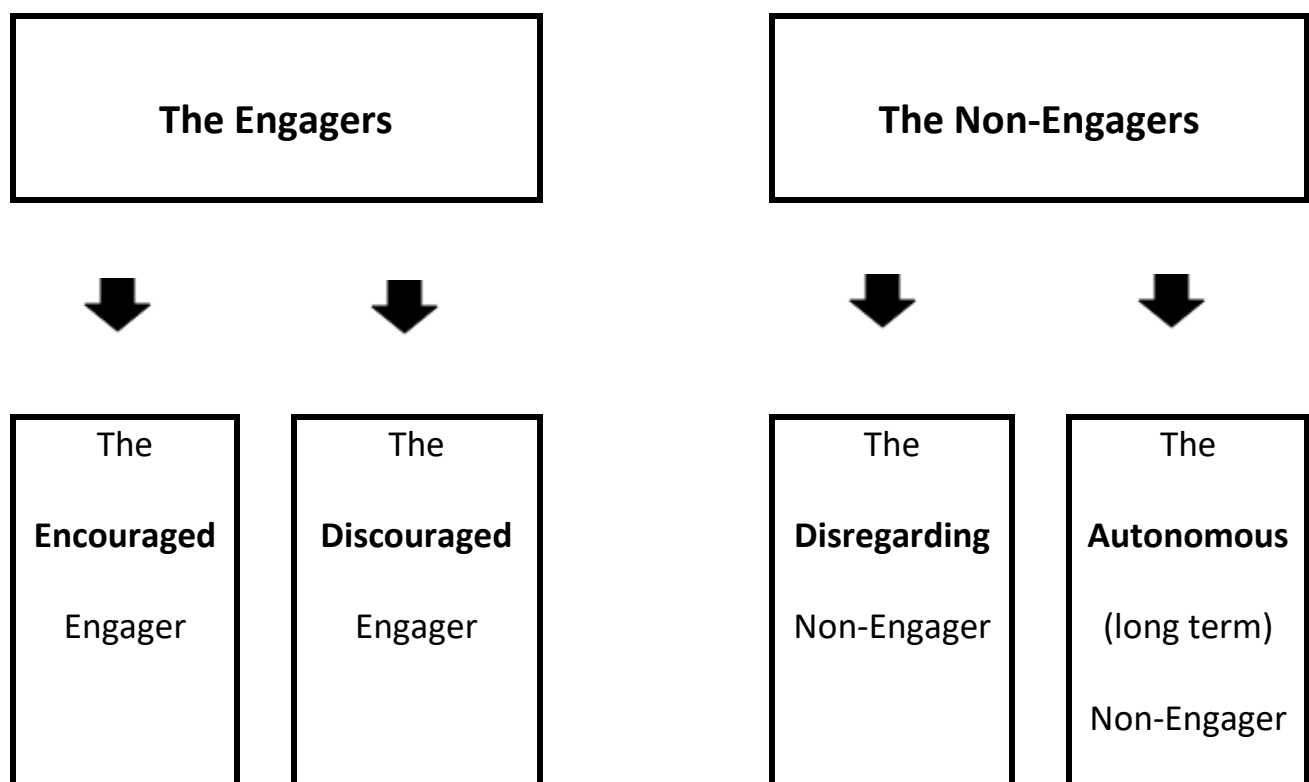


Figure 17: Sub grouping of Engager and Non-Engager students

Engagers described those participants who, from the outset, accepted the target setting process. Whilst some of them did not understand how the target grades had been set or who had set them, they were still accepting that this was a legitimate process with which they should engage. However, the engagers differed in terms of whether the target grades they were given acted as a motivator or disappointed them. This difference led to the descriptors of the **‘Encouraged Engager’** and the **‘Discouraged Engager’**.

Non-Engagers described those participants who expressed that they would not engage with or commit to the target setting process. Their reasons differed and led to the descriptors of **‘Disregarding Non-Engager’** and **‘Autonomous Non-Engager’**. The rationale for this categorisation, their experiences of target setting, and the possible impact of target setting on their studentship are considered in the next sections. In addition, whether students ultimately achieved their target grades at the end of the academic year is also discussed.

4.3.1 The experience of the Encouraged Engagers

From the outset Lloyd, Catherine and Beth not only accepted the target setting process, but were also encouraged by their target grades and expressed satisfaction with the level they had been set, as well as believing they were achievable. Lloyd stated:

‘Yes, I trust my teachers. They are accurate and I think they [the targets] are to (sic) my working level cos (sic) I got good GCSE grades and they were the grades I wanted’. [Lloyd]

Likewise, Catherine stated *‘I feel good about being given them and I believe them’*. Beth stated:

‘They are a good incentive...I am satisfied with them’. If you get different results in your homework or tests, they will probably put you in meetings to see how to help you get back up so they are a good thing’. [Beth]

They all engaged in the target setting process where they would review their target grade against every achievement grade they received. For example, Lloyd commented that:

‘One of the things I do is to compare the grade my work has got to my achievement grade to see how I am working to check I am on track’. If I see that I have got a C, I know that I am working hard but if I don’t get a C I know I can get it so I need to do better’. [Lloyd]

Catherine and Beth also described a similar process of any disparity urging them on to improve, although Catherine and Lloyd seemed to demonstrate a more resilient approach than Beth. For example, Catherine explained that when she achieved a grade that was lower than her target grade, rather than feeling disappointment '*it just makes [her] work, push [herself] harder*'. Lloyd's reaction was a little different; he acknowledged that when he received a lower grade for a piece of work, he knew he could have invested more time and commitment in it because usually the reason would be him leaving it to the last minute or rushing it. However, Beth suggested that whilst she generally welcomed negative feedback and felt by understanding her weaknesses this would enable her to improve, this was dependent on her mental state. She said:

'I can normally take the knocks...but if I am not in a great place and feeling down, I let things get to me, I don't feel great and I don't put as much effort in. I have had periods where I haven't felt great at all and I wouldn't put effort in, but when I am in a better place, I find myself engaging a lot more with activities, class and work in general'. [Beth]

In terms of their actual studentship (as indicated by attendance levels and formative assessment grades) across the academic year Lloyd, Catherine and Beth maintained high attendance. They all shared a similar perception which was that they felt motivated to do well, which may have contributed to their high attendance levels. They also all exhibited confidence, where Lloyd stated that '*I am as motivated as I can be...and I am yeeah (sic) fairly confident in hitting my target grades*'. Beth also said:

'I feel like I am a very academic person and I get along very well with exams and the academic side of things so my targets have matched what I can achieve. I am also a very competitive person, like I used to do gymnastics at a national level, my whole life I have had goals'. [Beth]

In terms one and two, Lloyd met and exceeded his target grades, but in term three, he underachieved by one grade in one of his subjects (AS Art and Design) which can be seen in Table 4 below. He generally met his target of a C grade in AS Art and Design in term one and two, but this slipped to a grade D (as indicated by the red grades) in term three.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS Art and Design	C	C	C	D
		B	C	D
				D
				D
AS ICT	D	D	D	D
		D	D	D
AS Media	C	A	C	C
		C		
		B		

Table 4: Lloyd's formative assessment grades across the academic year

This was also a similar experience for Beth where she generally met or exceeded her target grades in terms one and two in two subjects – AS Psychology and AS Politics, but underachieved by one grade in AS Politics in term three. However, she had generally exceeded her target grade B in AS Politics in the previous two terms. In AS History, she had less of a consistent experience, but met her target grade in the final term which can be seen in Table 5:

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS History	B	C	C	B
		D	A	
		C	C	
		B	C	
		B		
		A		
		C		
		C		
AS Politics	B	A	A	C
		A	A	
		A		
		A		
AS Psychology	B	B	A	B
		A	A	
		B	A	
		B	A	

Table 5: Beth's formative assessment grades across the academic year

Following the publication of results in the summer, Lloyd actually met two of his targets and exceeded his target for AS Media. He had exceeded his target grade in this subject in term one and had not underachieved against his target across the entire academic year so perhaps this indicated that he could potentially over achieve his target in this subject. Beth exceeded her target grades in all three subjects which, again, could have potentially been predicted in AS Politics and AS Psychology where her formative assessment scores were generally grade As, which she went on to achieve. Her A grade for AS History was more unexpected given her inconsistent grade achievement across the year.

Catherine had a more varied experience. In term one, she met or exceeded her grades in two subjects which were AS Maths and AS French, generally met her grades in AS Chemistry but underachieved in AS Biology. In term two, her grades slipped by roughly one grade across all of her subjects, with term three showing an improvement back to her target grade in three subjects, but she had a two grade drop in AS Maths. It seemed that Catherine was self-aware of her performance in different subjects, and these perceptions then actually manifested themselves in the results she actually achieved. Ultimately, for AS French and AS Biology, Catherine went on to exceed her target grades and for the subjects that she was underperforming in she did not achieve her target grades.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS Biology	B	D	A	B
		C	D	
		C	C	
		C		
AS Chemistry	B	B	B	
		C	C	C
		D	C	
		A		
AS French	B	A	B	A
		A	B	A
		A		
		A		
AS Maths	B	B	C	E
		B	C	C
		A		
		A		

Table 6: Catherine's formative assessment grades across the academic year

Figure 18 below provides an overview of the experiences of the Encouraged Engagers in terms of their engagement in target setting, expectations of achieving their grades and actual achievement.

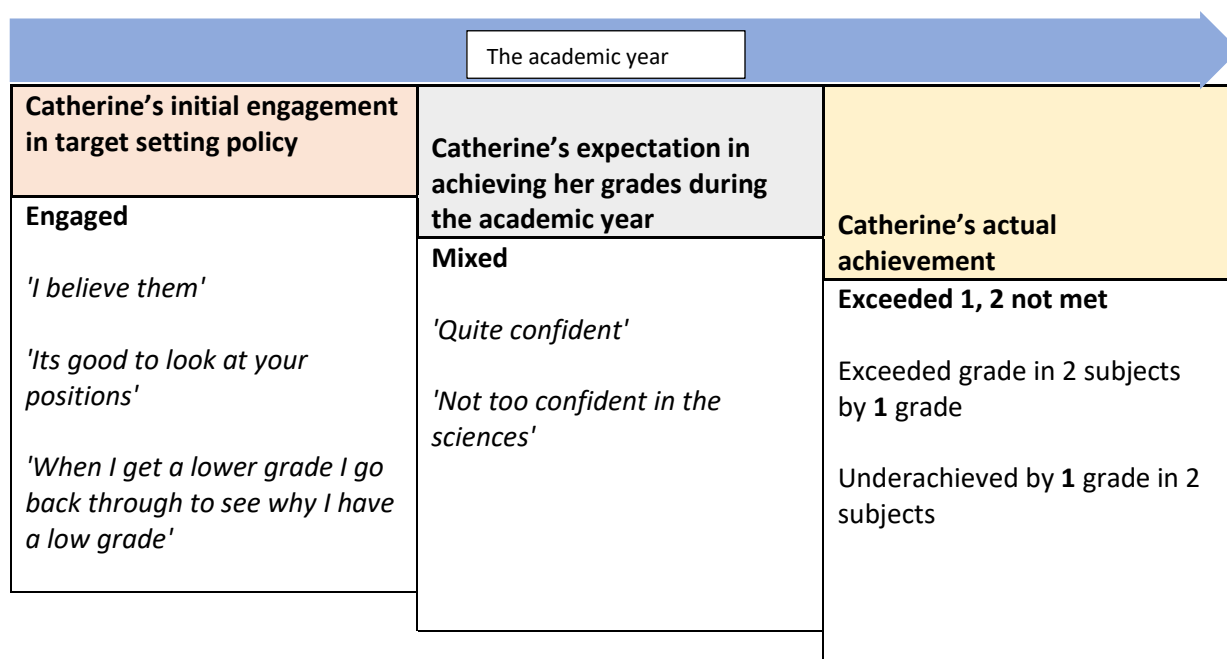
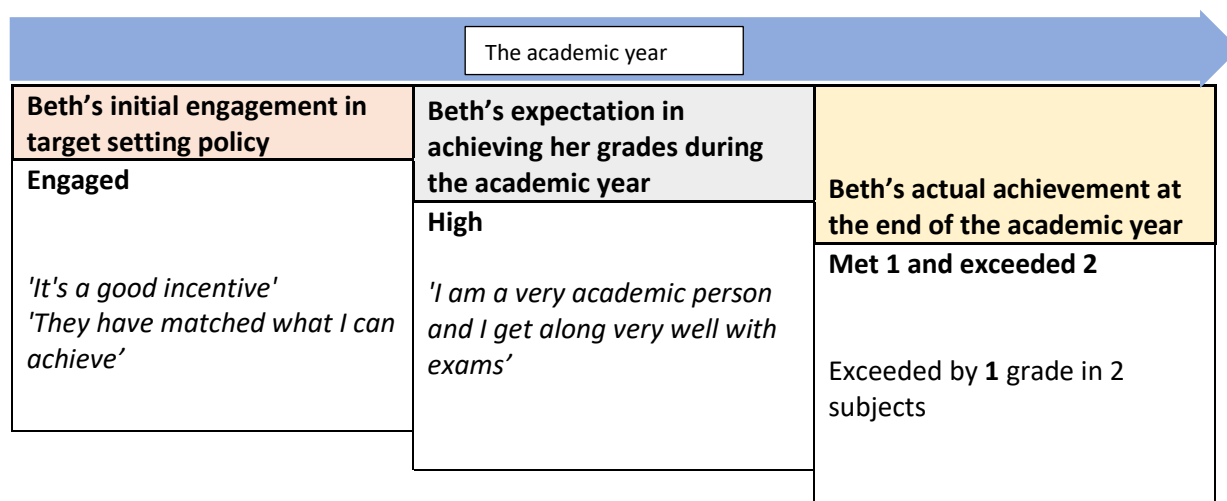
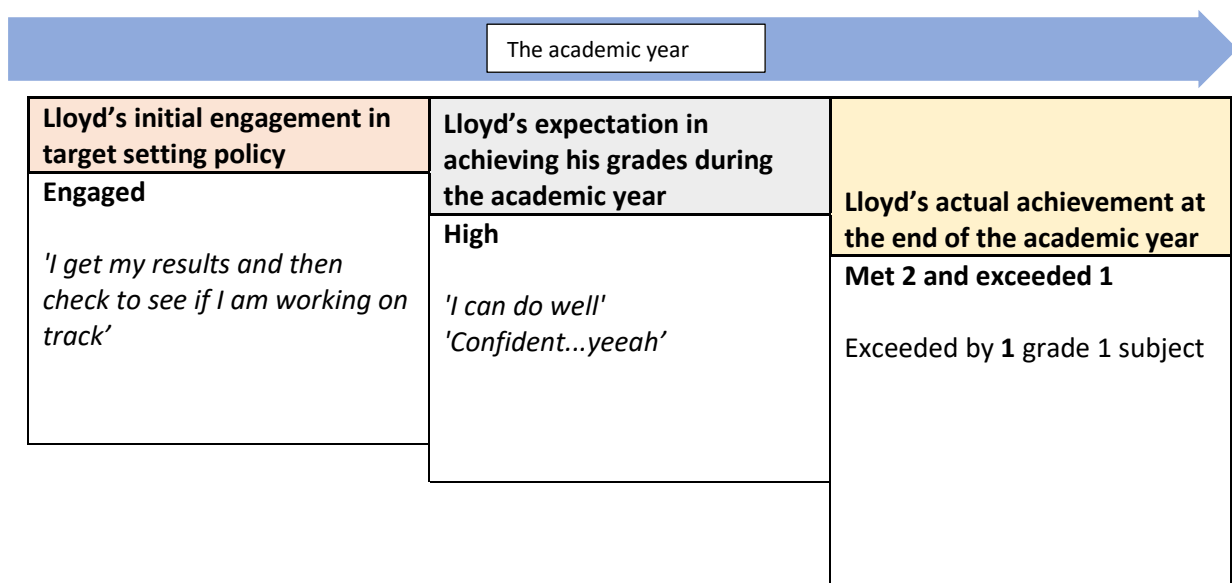


Figure 18: Overview of expectations of Encouraged Engagers and achievement of target grades

In summary, the experiences of Encouraged Engagers were as the college's target setting policy would expect. The participants accepted the process, exhibited the expected studentship behaviours and generally did very well in terms of the grades they attained. Catherine's experience was slightly less positive in that she did not achieve her target grades in two subjects; however, she was anticipating this to some extent. The following vignette describes Catherine's experience over the academic year in more detail.

Catherine's experience

Catherine was sixteen years old and classified as non-deprived. She stated that she was initially surprised at being given Bs for her target grades and was expecting lower grades. However, she did feel encouraged that the grades she had been given were higher than she was expecting. Catherine was asked if she compared her grades to that of her classmates and she explained that she wasn't concerned if she achieved a higher grade than her friends; rather if she gained a lower grade this would prompt her to work even harder. Likewise, if she received a low grade for a piece of work, she would embark on self-regulation behaviour in order to improve her knowledge, application and understanding in the area that attained the 'low grade'. Catherine felt that a negative mental state could impact on levels of distraction but she did not think it affected her and she always tried to follow up in areas where she had achieved a low grade.

Catherine stated that she always compared her target grade with the grade that she achieved on assessments/homework and that '*sometimes*' she exceeded it and '*sometimes*' she did not. When she achieved what she termed 'a low grade', she felt that this just acted to motivate her to work harder on the next piece of work. She did not feel disappointed or despondent - '*If I have a low grade, I go back through to see why I have got a low grade and I do questions to try and improve...which usually works*'. This approach typified Catherine's work ethic where she repeatedly stated '*the harder you work, the more you take in*'. Catherine believed that working hard was the key to achieving her target grades. However, she commented that working hard was not only her responsibility, but her teachers too.

Catherine believed she was motivated, but '*not totally there yet*'. When asked how confident she felt in achieving her target grades, she stated 'quite confident, not too confident... *probably more confident in French and Biology*'. This seemed to suggest that her confidence differed across the subjects that she was studying.

Consequently, from the college's perspective, whilst Catherine was clearly engaging in the target setting process through self-regularity behaviour and maintaining high attendance, formative assessment revealed there was uncertainty in whether she was going to achieve the target grades in two of her subjects.

In reality, this varying level of confidence was borne out as Catherine did in fact exceed her target grades for French and Biology, but for Maths and Chemistry she did not achieve her target grades by one grade.

4.3.2 The Discouraged Engagers

Three of the participants - Samiha, Ryan and Carl stated that they were demotivated by their target grades from the outset. Samiha felt the grades she had been set were too low and not only did she not expect to be given these grades, but she also felt that these lower grades were going to impact on her future goals. She stated:

'The grades I want are mainly Bs to get into uni (sic) but the target grades are Cs so it's not looking that good. I feel disappointed and am a bit worried and confused as I got an A for Chemistry, a B for Geography and an A for Geography so I expected higher'. [Samiha]*

Carl discussed the fact that he felt his target grades were:

'a bit low for me because I want to get As – that's what I believe I can get but the school thinks I am lower than this which makes me feel less confident in a way'. [Carl]

Similarly, Ryan also explained that he felt doubts about his own ability, based on the target grades he was given being lower than he was expecting. While this discouragement seemed to manifest in each participant's initial level of confidence, Ryan and Carl then suggested that this discouragement actually motivated them to work harder so that they would exceed the target grades they have been given. Carl stated:

'But it made me want to improve. I just want to do better, I need to just not think about their targets and focus on getting As for everything which is my target'. [Carl]

He engaged in self-regulating activity by stating he compared his target grades to his achievement grades after every formative assessment completed and maintained an optimistic outlook with comments like:

'I find positives in everything. Even if you get a bad grade, you don't dwell on it, I just move on and work hard to improve. They [the teachers] are trying to get you to the best of your ability'. [Carl]

He also welcomed feedback and stated:

'I see all feedback as positive to be honest...it's not negative as they are helping you to improve'. I trust my teachers to teach me the right stuff and at the right pace, so you just need to put in the work and listen to everything they say so I can do the best I can'. [Carl]

Likewise, Ryan also stated:

'Yeah, I was disappointed but it made me just want to work hard and get a better grade. Teachers are there to help, you just need to listen to them and not dwell on setbacks'. [Ryan]

Ryan and Carl also commented that they compared their grades to their classmates and used this as a further self-regulatory activity to raise their achievement level. Carl stated:

'Like if someone got a better grade than me, I ask them how. We sort of go through each question and compare to see who got the better answer and then learn from each other'. [Carl]

Whereas Carl and Ryan were able to find motivation from their initial discouragement, Samiha's experience was quite different. She stated that her confidence and self-belief was already low from the outset which was resulting in the way she was feeling:

'Not confident. Actually I am feeling quite worried. There's a lot of pressure and if you aren't doing well it can then affect how you are feeling on the inside, which then affects your education. Then you sort of can't do well if you aren't feeling mentally strong or confident I guess'. [Samiha]

Being less able to deal with stress and experiencing procrastination was also discussed at length during her interview where she gave examples which illustrated her doubts in her own learning strategy and overall ability by stating:

'I don't know how to get going in the first place or get down to revision, I just hope for the best...when I write it is shocking. I also can't write revision materials or make diagrams as it all looks a mess so I just end up reading. I am under so much pressure.. my belief in myself can be quite low, so I don't think I take in what I read'. [Samiha]

She also discussed her grandmother's death while studying for her GCSEs and how this was impacting on her education: *'If you are not in a good state of mind, you won't do well and your mental state will come before college'*. The potential impact of mental state was entirely the opposite for both Carl and Ryan where, for example, Ryan commented:

'I don't think your mental state affects your studentship. Like learning I feel it's just like a lifestyle. It's just something you do. You have to just get on with it and not let anything get in the way as I've seen classmates depressed and stuff, and how they then don't achieve their potential. [Ryan]

In terms of attendance, Carl and Ryan maintained very high levels of attendance (exceeding 97%) which was sustained across all three terms. However, Samiha's attendance in terms one and two was high, but this fell to 71% in term three. This decline was also seen in her academic achievement, which fell to grade Us in term three in two of her subject – AS Biology and AS Chemistry. Table 7 illustrates her somewhat negative experience in that nearly every formative assessment grade she achieved was below her target grade as seen by the red letters. Her performance in AS Chemistry was consistently low, however there was a noticeable decline in her performance across each term in AS Biology.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS Biology	C	C	E	U
		D	E	
		D	E	
		A		
		E	E	C
AS Chemistry	C	E	U	U
		U		
AS Geography	C	U	D	C
		U	D	
		A		
		U		
		A		

Table 7: Samiha's formative assessment grades across the academic year

Carl generally overachieved in AS Politics and AS Psychology as seen by the green letters in Table 8.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS History	B	C	C	B
		D	A	
		C	C	
		B	C	
		B		
		A		
		C		
		C		
AS Politics	B	A	A	C
		A	A	
		A		
		A		
AS Psychology	B	B	A	B
		A	A	
		B	A	
		B	A	

Table 8: Carl's formative assessment grades across the academic year

He had more of a variable experience in AS History where generally underperformed against his target grade in term two, but met his target grade in term three.

Ryan's experience was less consistent as seen in Table 9, although was a much more positive experience than Samiha's. He overachieved in one of his subjects – AS Maths across the academic year and generally met his target grade in AS History, although his experience in term one illustrated some underperformance. However, Ryan's achievement in his third subject – AS Psychology noticeably declined across the academic year where he was achieving A grades in the first term which had then declined by four grades to grade E in the final term.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS History	B	B	C	B
		D	B	
		D	C	
		C	B	
		B	B	
AS Maths	B	A	E	A
		B	A	
		A		
		A		
		A		
AS Psychology	B	A	C	E
		B	D	
		C	D	
		B		
		A		
		B		
		A		

Table 9: Ryan's formative assessment grades across the academic year

In terms of the actual results achieved at the end of the academic year, each participant's formative assessment mirrored their experiences with Carl exceeding his target grades in all three subjects, Ryan meeting his target grades in two subjects (AS History and AS Maths), but was one grade under in the subject he seemed to have found difficult across the academic year (AS Psychology). Samiha did not achieve any of her target grades and below is a vignette that illustrates the negative feelings that she experienced.

Samiha's experience

Samiha explained that in class she was asked to compare her target grade to the grade she received in assessments/homework and she often found this process demotivating. If she did get a grade that was lower than her own minimum expectation she commented that not only did her interest in the subject lessen, but this also affected her confidence and made her think that she needed to put more time and effort in. This then contributed to a heightened sense of pressure, which led to her not changing any studentship behaviours and resulted in her feeling overly frustrated.

However, Samiha welcomed feedback on her work; even if the comments were not positive as she felt that she needed to know how to improve. Samiha's view of intelligence was that of an incremental perspective; she stated that *'there is always something to know, understand. The more you use your brain, the more you can learn'*. However, she acknowledged that she could *'put more hours in as often I just can't get down to starting on any school work... and be more productive outside of college'*.

From the outset, Samiha stated that she did not feel confident in achieving the target grades she had set herself. Alongside lacking confidence, Samiha commented that she experienced a fluctuating sense of self-belief, which at times was very low.

Her father had also recently been hospitalised and was seriously ill, and again she felt that this would impact negatively on her performance at college. Samiha also referred back to a time when she felt depressed and this resulted in her not feeling at all motivated to engage in *'activities, class and work in general like essays'*.

In terms of predicting whether Samiha would achieve her target grades, it seemed that the many potential indicators suggested she would not. Her formative assessment experiences were nearly all negative experiences (where she rarely achieved her target grades) and she also experienced feelings of self-doubt, lack of interest and procrastination. Her attendance was also very low in the final term which may have been an indication as to the level of commitment she was feeling.

In reality, Samiha did not match any of her target grades. For one subject, she underachieved her target grade by two grades (AS Geography). For another subject, she did not meet her target grade by one grade (AS Biology) and for AS Chemistry she achieved a grade U (fail) which was a significant under-performance for her. However, as seen in Table 7, this was not unexpected given her performance across the academic year.

Figure 19 below provides an overview of the experiences of the Discouraged Engagers in terms of their engagement in target setting, expectations of achieving their grades and actual achievement.

The academic year		
Carl's initial engagement in target setting policy	Carl's expectation in achieving his grades during the academic year	Carl's actual achievement at the end of the academic year
Engaged <i>'It makes me want to improve'</i> <i>'I want to do better'</i>	High <i>'I believe it's how much work you put in that counts'</i> <i>'I am on the right track; Just need to keep doing what I am doing and I'm focused on what I want to achieve'</i>	Exceeded 3 Exceeded by 1 grade in all subjects.
The academic year		
Ryan's initial engagement in target setting policy	Ryan's expectation in achieving his grades during the academic year	Ryan's actual achievement at the end of the academic year
Engaged <i>'I like comparing my grades.'</i> <i>'I know where I am and what I need to do'</i>	High <i>'I know it's in me to get them'</i>	Met in 2, Not met in 1. Underachieved by 1 grade in the other subject
The academic year		
Samiha's initial engagement in target setting policy	Samiha's expectation in achieving her grades during the academic year	Samiha's actual achievement at the end of the academic year
Engaged <i>'I get my results and then compare it to what my target grade is and then ask for help or read my feedback that goes with it'</i>	Low <i>'Sometimes I think it can be quite low'</i> <i>'At the moment aren't feeling that confident with my dad situation'</i>	Not met in 3 Failed 1 subject Underachieved by 2 grades in one subject Underachieved by 1 grade in her other subject

Figure 19: Overview of Discouraged Engagers expectations and achievement of target grades

As explained above, Samiha's learning experience was a somewhat negative one. External factors such as her father's illness were impacting on her mental state and she was also feeling worried about not achieving her target grades. From the outset she was also lacking confidence, and this may have been confounded by her fairly recent GCSE experience where her grandmother had passed away. While she engaged in self-regulation, this was a generally a pessimistic occurrence which Samiha described as a cycle and illustrated in Figure 20:

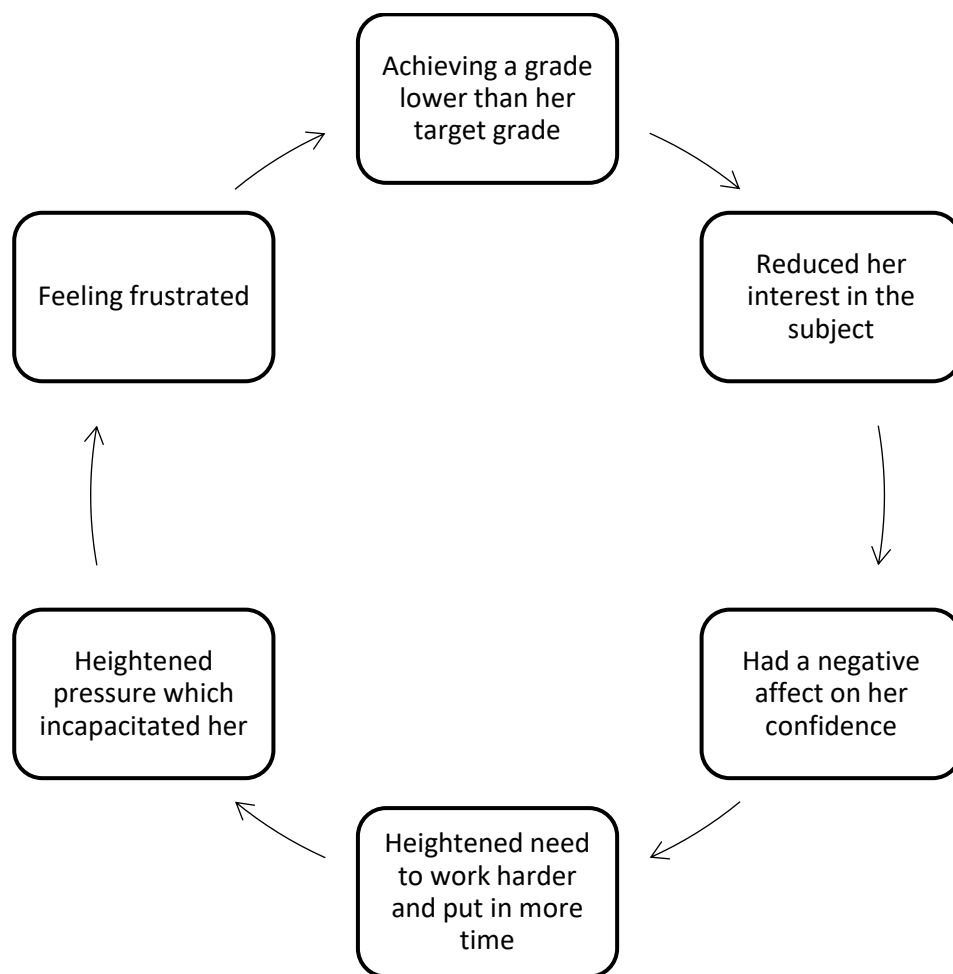


Figure 20: Samiha's cycle of discouragement

This cycle attempts to describe Samiha's experience in which she felt trapped. She handed in formative assessment that was marked and returned to her. Nearly every time the grade that she had back was lower than her target grade, which Samiha was already demotivated by, as she felt it

was too low for her plans to go to university. Achieving a low grade then impacted on her interest in the subject which also negatively impacted on her confidence. Yet she knew she had to work harder to escape this cycle, but the increased pressure she was feeling acted to incapacitate her more, as opposed to enabling her to address the situation. Samiha then felt increasingly frustrated which led to her underperform in the next formative assessment she completed, and thus trapped her in a cycle of discouragement.

Overall, whilst Discouraged Engagers were grouped in this category due to their experience of feeling demotivated by their target grades from the outset, this grouping did then demonstrate how different learning experiences can materialise as a possible result of self-belief. Carl and Ryan seemed to have much more self-belief and this contributed to a far more positive experience than Samiha who seemed to be locked in a cycle of discouragement.

4.3.3 The Disregarding Non-Engagers

There were two participants - Emrys and Fabienne - who entirely disregarded the target setting process, including the premise of being assigned target grades. Emrys expressed this viewpoint by saying:

'I think they are useless....I don't use them or stick to them. I know myself and there are all sorts of fluctuations that happen in exams that can affect what you get. I think there are lots of things that are out of your control. You don't choose to be born or where you are born for example. [Emrys]

Likewise, Fabienne stated:

'I don't need anyone's opinion – that's what someone else thinks I am going to achieve. I do believe in myself and I think I will pull something out of the bag'. [Fabienne]

They both talked extensively about procrastination and lack of motivation to undertake college work and to attend college. Emrys acknowledged that:

'I can put in a lot more hours; it's just I don't actually do this in practice. I often feel tired and this affects me working as I can't bring myself to do it. I also have this saying in life 'You have got two choices, do it now or regret it later' so I always regret it later (laughs)' [Emrys]

Fabienne stated that in college she left things to last minute, felt too relaxed, did not know where to start, put work off all the time, felt 'knackered' and 'didn't really have it in [her]'. She acknowledged she often:

'had all of the intentions of getting going but I just don't know how to start'. And 'I don't know what it is about me but I do leave things to last minute. I did the same for my GCSEs and I am a bit embarrassed that I then got good grades, although if I did learn a strategy from the beginning then maybe I would have done even better'. [Fabienne]

Both Fabienne and Emrys recognised context as being a factor which affected their effort and achievement. Emrys stated that:

'I don't use [targets] as I know myself that life just happens and then you need to just get on with it ...I think there are some things out of your control in different situations and you just respond to these things and not get too hung up on them'. [Emrys]

Similarly, Fabienne recognised that she lacked motivation, but this was entirely context specific. She contrasted her college experiences to two other scenarios - learning to drive and her parents' self-employment, and recognised that these experiences were entirely different. In relation to learning to drive, Fabienne had a desirable goal in that she had to get four buses a day in order to attend college and this resulted in long days for her with considerable travelling time. However, in learning to drive her travel time would fall to just 45 minutes in total per day. She also stated:

'But with driving, I really wanted to do it, I really loved it, not everyone likes to come to college but with driving I was so passionate. Getting four buses a day was making me really demotivated to come in (to college) as I was so knackered and I just wanted to take days off as getting the buses was such a long day. Learning to drive had to be done and I was just so motivated to pass as I didn't want to keep getting the buses'. [Fabienne]

Likewise, she referred to her parents' experiences where they had rarely taken any time off because they were self-employed and simply could not afford to do so, despite the fact that her father had been diagnosed with cancer.

This lack of motivation was also demonstrated in their assignment completion as shown in the Tables 10 and 11 below. Both avoided assignments, with Fabienne failing to submit nearly all her assignments in one subject as well as a noticeable decline in assignment submission in term two, followed by handing in only four assignments in term three. Similarly, Emrys handed in 16 assignments in term one, eight assignments in term two and five assignments in term three.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS Business	D	E	C	U
		U	C	
		C		
		C		
		U		
AS Criminology	D	C	E	B
AS Law	D	A	U	A
		C	C	D
		B	E	
		E		
		C		
		E		
		D		

Table 10: Fabienne's formative assessment grades across the academic year

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS English Literature	B	B	B	U
		A	C	
		B		
		C		
		B		
		C		
AS Maths	B	D	E	U
		U	U	C
		A	E	
		A		
		U		
		A		
AS Religious Studies	A	B	A	B
		A	U	U
		B	U	
		U		

Table 11: Emrys' formative assessment grades across the academic year

Neither Emrys nor Fabienne engaged in self-regulatory activity; Emrys stated that the only activity he undertook in receiving his formative assessment was to check the adding up of the marks by the teacher, while Fabienne explained that she did not pay any attention to feedback. In terms of formative assessment, both Emrys' and Fabienne's achievement grades were the most inconsistent across the academic year where they rarely met their target grades and either significantly underperformed or overperformed as seen by the red letters in the tables above. Other than Max (see Section 4.3.4), Emrys and Fabienne also received the most U grades (fails) for their formative assessment across the academic year. Furthermore, out of all the participants who took part in this research, Fabienne had the lowest level of attendance which, in term one was 88%, falling to 78% in term two and further dipping to 34% in the final term. This was 56 percentage points lower than the college's expected minimum. Emrys' attendance also followed a similar pattern of decline, falling to 68% in term three.

Fabienne and Emrys also shared a similar vision for their future. Unlike nearly all of the other participants, neither stated that achieving certain grades, going to university or having a particular career in mind was something that they were aiming for; rather they both had a less career focused, but potentially more lifestyle based aspiration for their future. Emrys expressed:

'I am kind of go with the flow, I have a clear idea of what I don't want to do in life, just not what I do want to do'. [Emrys]

While Fabienne stated:

'I want to have a nice life, not just about money but I want to do things. I mean everyone has different expectations about succeeding and I want to be in a position where I can do what I want to do and not be stuck with something I don't want to be stuck with'. [Fabienne]

This seemed to be a pertinent point made by Fabienne, as she was classed as the most deprived participant. The following vignette illustrates Fabienne's experience which was the most surprising as she was the most successful out of all the participants in terms of exceeding her target grades.

Fabienne's experience

Fabienne is 16 years old and is classified through her post code as living in one of the most deprived areas of the city. She did not accept the grades she had been given: *'It's rubbish...I know I will achieve more than a D... I think it is a bit rubbish to be honest. I mean everyone would want at least a grade C to get to a decent university'*. She also commented that this was someone else's opinion about what she was going to achieve and she *'would rather prove someone else wrong anyway'*.

Fabienne felt *'if you keep revising you will get more intelligent as the brain is a muscle that keeps growing'*. She was aware of her own strengths and weaknesses and stated that *'There are some people who start off differently. Some people will find it a lot harder than others, but everyone has certain strengths. Like with my maths. I really do struggle but I try but some people are naturally blessed but I do believe if you keep trying you will get better.'*

She also stated *'I know I am not the most capable'* but followed with *'but I do want to be successful so I don't have another option'*. She also acknowledged that she regularly procrastinated: *'I do leave things last minute... I just get too relaxed, like I had all of the intentions of getting going but I just didn't know how to start... and then I leave it to the very last minute'*. She referred to her experiences of GCSEs, where she considered the actual grades she gained as not reflective of her ability. This was due to her *'leaving things to last minute and if I could learn a strategy to start from the beginning then maybe I would do better'*.

She also described herself as lacking motivation commenting that *'I do try to say to myself "come on think of the long run" but sometimes I don't have it in me and just lack motivation'*. However, Fabienne then countered this with *'But eventually it has to be done. It really has to be done so it's not an option.'*

Consequently, from the college's perspective, Fabienne's approach caused serious concerns due to her lack of engagement in the target setting policy and self-regulation practices, her very low attendance rate, the number of U grades achieved and lack of work submitted. Therefore, in terms of predicting whether Fabienne would achieve her target grades, her formative assessment experiences along with procrastination issues suggested she would not.

Figure 21 below show the engagement, expectation of achieving grades and the actual grades that Fabienne and Emrys eventually achieved. Fabienne exceeded all of her target grades by two grades and, as already stated, this was the most positive and surprising variance experienced across all of the participants. It seemed that despite Fabienne's motivational issues, her wiry determination *'But eventually it has to be done. It really has to be done so it's not an option'* came through. Emrys also met his target grades for two subjects (AS Maths and AS Religious Studies) and underperformed by one grade for his other subject (AS English Literature) which again was somewhat surprising given his inconsistent formative assessment grade achievement during the academic year and general lack of motivation.

The academic year		
Fabienne's initial engagement in target setting policy	Fabienne's expectation in achieving her grades during the academic year	Fabienne's actual achievement at the end of the academic year
Not Engaged <i>'It's rubbish'</i> <i>'I don't need anyone else's opinion'</i>	High (in relation to being successful as opposed to achieving certain grades) <i>'I do believe in myself and I think I will pull something out of the bag'.</i>	Exceeded all 3 Exceeded by 2 grades in all 3 subjects
The academic year		
Emrys' engagement in target setting policy	Emrys' expectation in achieving his grades	Emrys' actual achievement at the end of the academic year
Not Engaged <i>'I think they are sort of useless'</i> <i>'I don't use them or stick to them'</i>	High (in relation to being successful as opposed to achieving certain grades) <i>'I am confident ... I have always had this saying that in life you have got two choices, do it now or regret it later'</i>	Met 2, not met 1 Underachieved by 1 grade in 1 subject

Figure 21: Overview of Disregarding Non-Engagers expectations and achievement of target grades

In summary, the Disregarding Non-Engagers were surprising in terms of their, generally, very successful outcomes but also very different in comparison to the previous groupings. Most noticeable was their approach to college work which was characterised by poor attendance, inconsistent grade achievement and a general lack of motivation. Yet, despite this, there seemed to be an inner resolve to succeed and this success was not measured by the achievement of target

grades. This perception was also shared by the Autonomous Non-Engagers, as described in the next section.

4.3.4 The Autonomous Non-Engagers

The Autonomous Non-Engagers were described as such, due to their looking beyond the target grades' approach. Max, Cecelia and Tamara saw the target grades they had been assigned as largely irrelevant since they had their own end goals which looked ahead of the short term notion of achievement of grades. In clear contrast with the Disregarders they all had a very clear expectations and direction in which they were headed. Tamara explained that she was aiming to go to Oxford University and this goal motivated her to work hard. She explained that target grades were irrelevant as she just needed to learn as much as possible, whereas Cecelia stated *'for some people I guess they are something to aim for, but I have in my own mind what I want to achieve in life'*.

Max stated:

'I don't care about getting A levels, all I want to do is be the best. I am really competitive and I'm disappointed if I am not top, but that's my problem. I've always been top, even in sport where I've played rugby for 13 years and football for nearly that long. I just need to win at everything'. [Max]

In practice this meant that Max, Cecelia and Tamara did not engage in the target setting process of comparing their achievement grade to their target grade for each formative piece of work they completed. Instead, all three participants stated that the grade was irrelevant and, specifically for Max and Tamara, written and verbal feedback was the most important feature of assessed work.

Max stated:

'Feedback is one of my favourite parts, that's what I enjoy most is getting feedback as that's where I can learn. I want teachers to be more negative with me and more harsh I want to fail as it leads to learning. I need a kick up the arse'. [Max]

Tamara explained that written feedback was not enough; she would also consult the teacher at the end of the lesson to find out how she could produce a 'perfect' piece of work, and she would then redo the task to achieve this. Like Max, her focus was on everything she had done wrong or could do better. Tamara stated:

'Sometimes the feedback is too general, so I go back to the teacher and ask them to be more critical or explain why I didn't get full marks. Feedback is useful as that's what makes you improve, so when I don't get enough I wait behind at the end of the lesson to get more'. [Tamara]

Therefore, Max and Tamara were in part looking for failed aspects, because they believed this would contribute more to their learning and their long term goals as opposed to the short term achievement in meeting target grades. Cecelia also stated that she *'didn't pay attention'* to her formative assessment grades, but contrastingly, she stated that in relation to feedback:

'I just don't really want to see it...I just want to move on. Sometimes I know if I haven't put enough time or effort into it so I don't want to read it or see it'. [Cecelia]

As opposed to focusing on the negatives, her motivation to work came from stress:

'I need something to motivate me and that is usually stress. Umm, I kind of need something to motivate me as I wouldn't feel motivated before an exam otherwise. Anything that is a long way off I think 'oh, I can do it later, then it comes later and I think 'oh' and then I get stressed and then I go for it'. [Cecelia]

Max, Tamara and Cecilia all shared an inner sense of confidence regarding their ability and the likelihood of success and all shared a similar understanding of intelligence. Max talked at length about how others may regard him as *'cocky'* but he had self-belief in everything he did. He also described himself as *'naturally good at stuff'*, as well as stating:

'Not everyone has the same level of intelligence...some people can't go any higher. Getting a degree will probably be easy for me. I know I big myself up and then I achieve it, so I do have massive self-belief in what I can do. Actually I have to reign it in a lot because there is a fine line between being confident and being arrogant, and that's a line I struggle quite a lot with'. [Max]

Similarly, Tamara explained that since she was young, she always knew she was very capable and she stated that:

'I achieve an A grade but I know I am capable of more, whereas some people will never get higher than a grade C, for example'. Since I have been at high school I have known that I will get really good results, so I know I am capable of whatever I want to do with my life'. [Tamara]

Cecelia stated that:

'I am naturally smart...some people can be pushed and can get better, but some people generally struggle and can't improve. I didn't really have to try hard with my GCSEs as they were just easy but now I do have to put in more effort'. [Cecelia]

In terms of their attendance and formative assessment experiences, Tamara generally achieved her target grades consistently throughout the academic year and maintained one of the highest levels of attendance. This can be seen in Table 12 where her performance in AS English Literature, AS French and AS German were highly consistent. She did underachieve in AS German in term one, but was able to address this underperformance in the remaining terms.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS English Literature	A	A	A	A
		A	A	A
		B		
		A		
		A		
		A		
AS French	A	A	B	A
		A		A
		A		
		A		
		A		
AS German	A	B	A	A
		A	C	
		D		
		C		
		B		
		A*		
		A		
		A		
AS Spanish	A	A	A	A
		A		

Table 12: Tamara's formative assessment grades across the academic year

However, Max and Cecelia's experiences were inconsistent and both tended to underachieve. Other than Samiha, Max and Cecelia had more incidences of underachievement than any other participant, which can be seen in Tables 13 and 14, as highlighted by the red grades. In the first term, Max performed at his target grade in AS English Literature, but in term two, this performance entirely slipped and he did not achieve his target grade at all, but he was able to pull this back up in the final term. However, in AS Geography, Max only once achieved his target grade across the entire academic year. He also achieved three U grades which represented five grades under his target. In AS History, he generally performed under his target grade, but not as significant as was his experience in AS Geography.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS English Literature	A	A	B	A
		A	C	A
		A	D	
		A		
AS Geography	A	U	B	C
		B	U	
		D		
		U		
		A		
AS History	A	A	B	A
		C	C	
		C	C	
		C	U	
		C		
		A		

Table 13: Max's formative assessment grades across the academic year

Cecelia's experience of underachievement was similar to Max. In AS Biology and AS History she underperformed against her target grades significantly, particularly in term 1. Her grades in term three also showed a significant underperformance with U grades for AS Biology and AS Psychology as seen in Table 14.

Subject	Target grade	Term 1 Assessment grades	Term 2 Assessment grades	Term 3 Assessment grades
AS Biology	B	B	A	U
		E	D	A
		D		
		U		
		D		
AS History	B	D	D	D
		C	C	C
		D	B	
		C		
		B		
		D		
		D		
AS Psychology	B	A	C	A
		A	A	E
		B		U
		C		
		A		

Table 14: Cecelia's formative assessment grades across the academic year

Both Cecelia and Max showed a decline in their attendance over the academic year, whereby in term three, Cecelia's attendance was 85% and Max's was 68%. Nevertheless, Max went on to achieve his target grades, as did Tamara, while Cecelia over achieved in one subject (AS Psychology) and matched her other grades. This was the most successful grouping of participants as shown in Figure 22. All elected not to engage in the target setting process, but all had high expectations of achieving good grades and all went on to achieve very good grades that either met or exceeded the target grades they had been assigned.

The most noticeable feature of this grouping was their inner confidence that was very secure and seemed to be grounded in high school experiences of being perceived as academically bright by others. This was particularly evident with Max as described in the vignette following Figure 22.

The academic year		
Max's initial engagement in target setting policy	Max's expectation in achieving his grades during the academic year	Max's actual achievement at the end of the academic year
Not Engaged <i>'I think having targets makes no difference at all'</i>	High <i>'I am naturally good at stuff'</i> <i>'I am quite cocky'</i> <i>'I have a self-belief in what I do'</i>	Met all 3
The academic year		
Cecelia's initial engagement in target setting policy	Cecelia's expectation in achieving her grades during the academic year	Cecelia's actual achievement at the end of the academic year
Not Engaged <i>'I have in my own mind what success is'</i>	High <i>'I am naturally smart'</i> <i>'I know it will be alright in the end'</i>	Met 2, exceeded 1 Overachieved by 1 grade in the other subject
The academic year		
Tamara's initial engagement in target setting policy	Tamara's expectation in achieving her grades during the academic year	Tamara's actual achievement at the end of the academic year
Not Engaged <i>'I am headed for Oxford University...hitting grades isn't enough'</i>	High <i>'Since I have been in high school...I mean I have known since I have been getting really good results so I know what I am capable of'</i>	Met all 3

Figure 22: Overview of Autonomous Non-Engagers expectations and achievement of target grades

Max's experience

Max is sixteen years old and lives in a non-deprived suburb outside of the city. He knew his target grades and believed them to be calculated by the government who used postcodes and parental occupations as a means of calculating them. As was the case with Fabienne, Max did not readily accept his grades. Instead, he commented that he felt indifferent to them, because his aspiration was based on *'wanting to win'*. He gave an example based on his experience of getting his GCSE results. Instead of being happy that he had achieved 10 A*s and 2 As, he was actually *'annoyed'* that someone in his year group had achieved 11 A*s and 2 As. Furthermore, he stated that *'being told what you need to get you don't feel any achievement for it. You don't think you have exceeded, instead you have done what is expected of you...I want to win'*.

He also talked about the experiences of his parents and whilst they were both academically bright, and attended university, they did not *'use'* their qualifications but were still highly successful. His father had a performing arts degree, and now owned a theatre but he did not need a degree to be in the successful position he now found himself. Similarly, his mother had a degree in religious education but now owns a shop. Max stated *'I know it is a bit unorthodox to say this, but my mum doesn't really do anything with her degree. I will get a degree but I don't think I will feel any accomplishment in getting it'*.

Max also stated he had no interest in comparing his target grade to his formative grades. He stated that he had been achieving some grade Bs and Cs *'but my teacher isn't worried'*. He also stated *'it's unrealistic to come here and smash it straight away. I am disappointed if I am not top in the class, but that's my problem as I am so competitive. You just have to do it, learn what you did wrong and then redo it. It's a process'*. He also stated *'I am just a very competitive person, it's not necessarily me wanting to show everyone I am smart, its more me – I want to win'*.

Max possessed his own belief about intelligence and discussed his reasoning behind this at length. He stated that *'not everyone has the same amount of intelligence, and that is a fact. You can tell people who are naturally bright but you can also see those who have worked their arses off and those that haven't. I have always admired people who have worked really hard as I have never worked flat out and just done what is needed. But I do think some people are held down due to their environment and can't go any higher'*.

Max talked at length about his feelings and attributes. When asked how likely he thought he was going to attain his target grades, he stated *'Umm... I have always struggled in terms of motivation, it's not so much motivated to do well, but motivated to do myself justice...At school I won the award for the biggest ego and I know I am quite cocky...and I do have self-belief in what I can do but I reign it in a lot of the time because there is a fine line between being confident and arrogant'*. He referred to his parents not wanting to push him and instead wanting him to learn to stay motivated *'as that was part of the real world'*. Despite his motivation concerns, Max stated *'I know I can do it, I just need to put the work in'*.

Max's comment about how he struggled with motivation which resulted in him *'dragging'* himself into college because coming to college was *'very tiring'*; this seemed to manifest in his attendance level which fell to 68% in term three. His formative assessment showed significant variability in two of his subjects where he was underperforming against his targets and there was significant underperformance in AS Geography. In this subject, Max did not achieve his target grade in any formative assessment and in fact achieved 38% grade Us. Similarly, in AS History Max generally achieved grade Cs for the work he submitted. However, Max went on to achieve all of his target grades which again was unexpected from the college's perspective, given his formative assessment experiences and attendance, but was not unexpected for Max.

4.4 Conclusions

This chapter has presented the findings and the interpretation of the data captured, following the semi structured interviews and documentation analysis. Two overarching types of responses were identified – those participants who engaged with the target setting process and those who did not engage. These themes were further subdivided to describe two further types in relation to each theme, and participant experiences were described for each category and supported by vignettes. These descriptions used quotes to illustrate participant experiences and drew on data relating to attendance and formative assessment grades across the academic year. The next chapter provides a theoretical interpretation of these categories, primarily drawing on concepts related to self-belief such as the locus of control and self-efficacy, but also on target setting and feedback research as discussed in the Chapter two's Literature Review.

Chapter 5 Discussion

5.1 Introduction

As described in the Literature Review, there has been a large body of research exploring self-belief and how it can relate to academic behaviours, attitudes and overall attainment. This chapter explores the extent to which such theory and research findings may acquiesce with the perceptions, experiences, academic behaviours and attitudes of the students in this case study. The chapter will surmise that some findings described in the previous chapter supported established research findings concerning target setting theory, the locus of control and self-efficacy, especially in relation to the Discouraged Engagers, Disregarding Non-Engagers and Autonomous Non-Engagers. This will lead to stating some inferences in order to promote further professional dialogue in target setting debate.

As described in Chapter 3, through purposive sampling, three participants who scored very highly on a self-efficacy questionnaire and three that had a low score were selected, along with three participants whose questionnaire results indicated a strong internal locus of control and three whose questionnaire results indicated a strong external locus of control. These self-efficacy and locus of control categorisations will now be reconciled against each of the groupings described in Chapter 4 – the Autonomous Non-Engagers, the Disregarding Non-Engagers, the Discouraged Engagers, and the Encouraged Engagers.

5.2. An internal locus of control and its influence on the target setting experience

The previous chapter described Autonomous Non-Engagers as students who looked beyond the target grade approach. Max, Cecelia and Tamara perceived the target grades they had been assigned as largely irrelevant since they had their own end goals that looked ahead of the short-term notion of achievement of grades. They also shared similar self-belief categorisations:

- Cecelia and Tamara were categorised as having a **strong internal locus of control**

- Max was categorised as having **low self-efficacy**. However, Max's **locus of control** was also identified as strongly **internal** from the initial questionnaire he completed.

The potential impact of a strong internal locus of control will now be explored by considering the Autonomous Non-Engagers' beliefs' about their ability, formative assessment experience and value of feedback, use of sources in promoting self-efficacy, views on intelligence and shared behaviours and attributes. Inferences about Autonomous Non-Engagers in relation to their target setting experience will then be discussed.

5.2.1 An internal locus of control and beliefs about ability

As discussed in Section 2.7, an internal locus of control indicates that an individual believes that they are responsible for what happens to them. This emphasizes the belief that an individual is in control, as opposed to being subject to fate and/or chance, or other external forces in their environment (such as people). Research described in the Literature Review suggested an interrelationship between intelligence, self-esteem, neuroticism and locus of control (Furnham & Cheng 2016a), where more intelligent children had higher self-esteem, lower levels of neuroticism and an internal locus of control. This certainly fits with Max, Cecelia and Tamara as none needed reinforcement regarding beliefs about their own ability, as they were already secure in their belief about themselves. They were all competitive, assertive, confident and engaged in many extra-curricular activities both inside and outside of college which indicated high levels of self-esteem. For example, Max recalled that at his end of year school awards he was given the prize for the 'biggest ego' due to the degree of confidence he exhibited, while Tamara stated that she believed she could achieve whatever she wanted. As self-esteem tends to be a stable and enduring trait, it is postulated that this may supersede the need to engage in enactive mastery experiences such as comparing a target grade to an achievement grade and consequently judging whether a task was successful or not in order to raise self-belief. This proposition does seem to offer an explanation for the Autonomous Non Engager's long term outlook as opposed to focusing on the short term achievement of target grades. Max, Cecelia and Tamara had the highest GCSE scores on entry which further supports Furnham and Cheng's (2016a,b) findings that more intelligent children tend to

have a more internal locus of control. Max, Cecelia and Tamara also shared a secure inner confidence which seemed to be grounded on high school experiences of being perceived as academically bright by others. Swann et al. (1988) reported that feedback which signified a personal talent or potential ability would lead to better coping in the face of disconfirmation feedback and this may partially explain the inner confidence and resilience which was shared by this grouping.

5.2.2 An internal locus of control and formative assessment experience and feedback

Max and Cecelia's studentship experiences across the academic year may have also reflected the proposition that their need to engage in enactive mastery experiences, such as comparing a target grade to an achievement grade and consequently judging whether a task was successful, was superseded. Instead, their longer-term outlook (as opposed to focusing on the short-term achievement of target grades), may have been more pervasive as they were inconsistent in the formative grades they achieved. Both tended to significantly underperform and achieved many U (fail) grades which may have indicated a lack of motivation to apply themselves to every piece of work they were set. Achieving grade Us did not seem to knock their confidence, which again indicates not only a level of resilience, but perhaps also a deep rooted belief in their level of ability. In comparison, Tamara was much more consistent and never gained a U grade, or slipped more than two grades for any formative assessment across the entire academic year. Tamara's studentship experience is supported by extensive findings where a strong internal locus of control has been associated with completion of work set through distance learning (Trice & Milton 1987), completion of homework before deadline dates (Janssen & Carton 1999) and experience of less procrastination (Deniz et al. 2009).

Max and Tamara actively sought feedback and specifically sought negative feedback as they believed this would enhance their learning more effectively. This focus on seeking negative as opposed to positive feedback has been reported in research, where those with a strong internal locus of control are more likely to persevere when faced with negative feedback (Dweck & Leggett 1988). Research has also reported that students with high levels of self-efficacy were more likely to

seek out unfavourable feedback in order to excel at tasks (Swann et al. 1988). However, this finding was not supported in this research; where instead, a strong locus of control, as opposed to a high level of self-efficacy being the determining factor.

5.2.3 Sources of self-efficacy

Research pertaining to self-efficacy did not fit well with some members of this grouping. The variability in achievement, including the many U grades achieved by Max and Tamara, and their focus on negative as opposed to positive feedback seem at odds with Bandura's (1977) notion of self-efficacy. Bandura stated that if students identified that they had succeeded on a task, this would strengthen their belief in their own capabilities. Yet for Max and Tamara, achieving U grades did not seem to result in the perception of 'failure' at all. Bandura also stated that vicarious experiences contribute to self-efficacy, which refers to individuals comparing themselves to others, and then reaching conclusions about their own capabilities. Max, Cecelia and Tamara all stated that they always compared themselves to others, but again this did not seem to lower Max and Tamara's inner sense of confidence, as they would have been comparing their U grades to others' higher achievement. Nevertheless, this may have also been due to their outlook which was much more long-term as opposed to focusing on the short-term achievement of target grades. However, Bandura also referred to two other sources of self-efficacy – social persuasion and emotional/physical state which Max and Tamara highlighted as relevant to them. Both relished feedback which would be considered as social persuasion but, unlike some of the other participants, Max and Tamara actively sought their teachers to engage in verbal feedback in conjunction with the written feedback that they had received on their formative assessment. This additional verbal feedback may have helped bolster a perception that they possessed the capabilities to master the subject matter. It may have also helped eliminate self-doubt and any personal deficiencies. Bandura also emphasised emotional/physical states where some individuals will interpret their stress reactions and tension as signs of vulnerability to poor performance; a positive mood enhances perceived self-efficacy while a despondent mood diminishes it. Bandura stated that a way of modifying self-belief is to reduce people's stress reactions and alter their negative emotional proclivities and misinterpretations of their physical states. This strategy was

particularly apparent in Max, where he talked at length about his fatigue but did not seem to relate this to his ability level at all, as he recognised that his emotional state was separate to his actual ability. On the other hand, for some of the other participants such as Samiha, her despondent mood seemed to negatively affect her belief in herself and her capabilities.

It may also be that self-efficacy is built over time and for some students it is less susceptible to change. Max, Tamara and Cecelia had some of the strongest GCSE profiles across the sample. Perhaps their inner confidence was based on previous successful achievement and the short term judging whether specific tasks were successes or failures did not impact upon their enduring inner confidence.

5.2.4 An entity view of intelligence

Max, Cecelia and Tamara's experiences did not concur with Dweck et al.'s (1995) findings relating to intelligence. Dweck et al.'s (1995) approach to intelligence stated that people can be attributed to having either an entity belief or an incremental belief. People who hold an entity view about intelligence believe it is a fixed ability and adopt performance goals that are fairly easy in order to perform well compared to others (Dweck 1999). On the other hand, people who hold an incremental view do not consider intelligence as a fixed ability; rather it can be improved. They will be inclined to set mastery goals, which are goals related to being the best they can at a task. However, all three stated they had an entity view of intelligence with comments relating to the fact that '*some people can't improve*' (Cecelia) or '*go any higher*' (Max). This was somewhat surprising as Dweck et al. (1995) proposed that the belief that is held is founded on the locus of control and such beliefs *precede* the emergence of the locus of control. Specifically, people who perceive an inability to control intelligence will then, for example, view negative outcomes in academic tests as out of their control, hence akin to the thought processes associated with an external locus of control. They will also exert less effort to produce academic success and may become helpless when faced with academic failures (Dweck & Leggett 1988). Cecelia, Tamara and, to a lesser extent, Max had been categorised as having a strong internal locus of control and were certainly not helpless when faced with academic failures where Max and Tamara also actively sought out negative feedback, which does not seem to fit with an entity belief.

Those who hold incremental views about intelligence will see outcomes as under their control and akin to the thought process associated with an internal locus of control. They will also be much more likely to persevere when faced with negative feedback (Dweck & Leggett 1988). So clearly, Max, Tamara and Cecelia's experiences seemed much more akin to this view of intelligence as they all demonstrated perseverance, sought improvement and Max, for example, wanted to be the 'best'. It is postulated that this groupings' entity belief was based on their high school experience of being told that they were all 'academically bright' which implies innate intelligence capacity differences between students. When talking about their view of intelligence, they all drew on examples of others and not themselves, so perhaps an individual's view of intelligence is based on a particular context or experiences and is not as straightforward as suggesting individuals hold one of two perspectives.

5.2.5 Shared behaviours and attitudes

Figure 23 illustrates the similar behaviours and attributes exhibited by the Autonomous Non - Engagers:

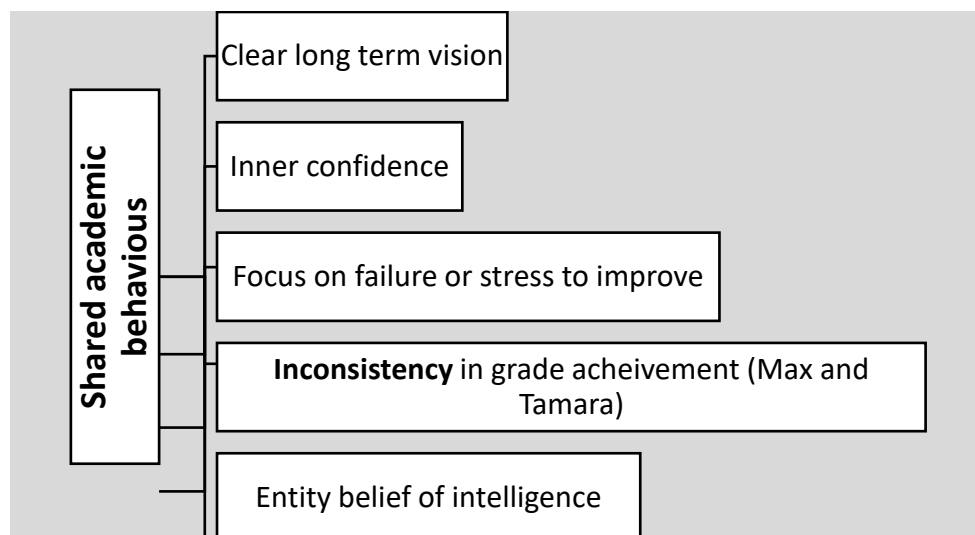


Figure 23: Overview of Autonomous Non-Engagers and their shared academic behaviours

All three participants shared a secure long-term vision and this perspective seemed to make them resilient, confident and promote self-esteem. They all possessed an inner confidence that was not

knocked, despite inconsistent grade achievement and attendance across the academic year. This inner confidence may have been as a result of their very strong GCSE profiles and all reporting that they had been told that they were very able by their teachers at school. These two factors may then have contributed to them all sharing an entity belief in relation to intelligence where they regarded some people to possess more intellectual capacity than others. It can be surmised that in recognising that their GCSE grades were much higher than their classmates, and being told that they were academically able, this contributed to them holding an entity belief of intelligence as opposed to incremental belief. According to entity theory, intelligence is a personal quality that is fixed and cannot be improved through effort, so in being told that you are more academically able suggests that those who are less academically able cannot improve. This grouping's self-regulatory behaviour starting point was not on the grades that they had been given for formative assessment, but either as a result of stress or on the areas where they had underperformed, which was in stark contrast with the self-regularity behaviour exhibited by the Engagers. It could be said that this grouping 'looked at the bigger picture'. They did not let low grade achievement on assessments affect their self-belief, nor did they always attend lessons or hand in assignments; yet this sometimes poor attitude to studentship did not seem to impact on their belief in themselves and where they were headed.

To some extent, this grouping demonstrated the personal facilitating factors that Jouhari et al. (2015) outlined. These authors described five themes that promoted success which included feeling that your actions affected your successes, which to some extent Max, Tamara and Cecelia demonstrated in their pursuit of negative feedback, for example. Having high self-esteem and personal desire were also factors, which again were shared by the students in this grouping. However, they also stated being motivated and self-efficacy were key factors to success and it appears the findings from this research can illuminate a deeper meaning of what is meant by 'being motivated'. Max and Tamara's motivation was different to Cecelia's motivation. Cecelia demonstrated motivation in terms of her consistently high attendance level which was 99% in Term one, falling slightly to 97% in Term two and resuming back to 99% in Term three, and consistent achievement of her target grade across the academic year. There were also only seven instances where she did not meet her target grade on formative assessments. However, Max and Tamara's experience was different in that both were very inconsistent in their achievement of their target grades in formative assessments and attendance. In Term three, Tamara's attendance fell to 85%

and Max's attendance declined to 68% in Term three. Nevertheless, both Max and Tamara described themselves as 'motivated'. Where Hattie and Timperley (2007) described levels of feedback, it could be concluded that motivation can be viewed in a similar way as described in Figure 24. Students may or may not have motivation to undertake a task (MT), engage in a process (MP), actively regulate their actions (MR) or be self-motivated (MS) to seek out more, in the pursuit of a goal. In applying Hattie and Timperley's feedback levels to motivation, motivation could be seen at task level, for example, in the completion of specific formative assessments (to which Cecelia demonstrated motivation to not only complete all assignments but to also do the best she could), but can also be viewed at process level, self-regulation level and self-level. Max and Tamara seemed more motivated at self-level and self-regulation level. They were generally highly self-motivated (MS) to succeed and this was motivation was not simply to pass their A levels, but at a much broader, long term level. They also were motivated to self-regulate (MR) and this can be seen in their pursuit of feedback and comparisons with others. However, they were much less motivated at task level (MT), as seen by non-submission of assignments and the achievement of grade Us in formative assessments. Their engagement in the process (MP) was also lacking at times as seen by their low attendance.

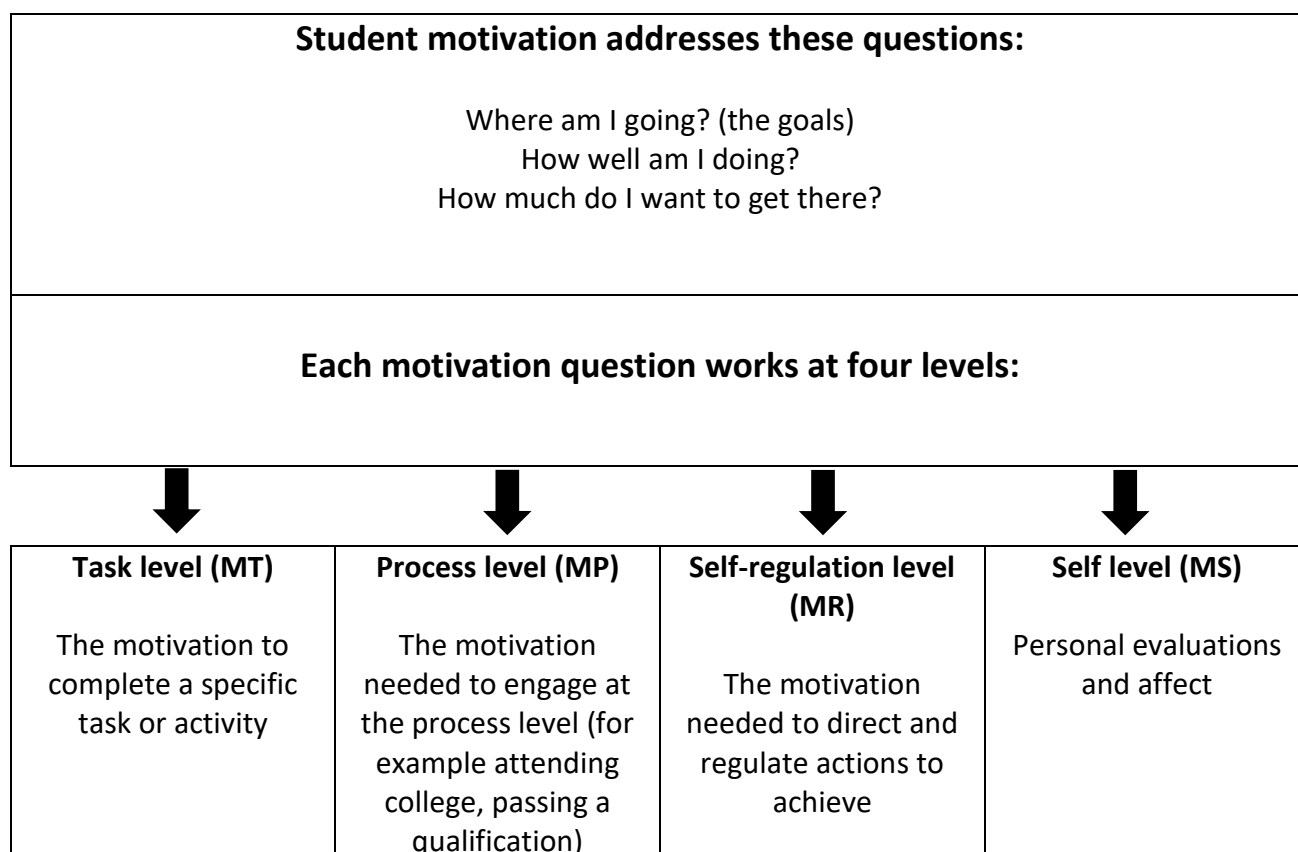


Figure 24: Student motivation at different levels

Therefore, it appears that it is possible to distinguish different types of motivation which may impact on outcomes and help explain studentship behaviours and attitudes.

5.2.6 Human capital investment

Max's motivation at self and self-regulation level and less at task and process level may also be as a result of his perceptions regarding his role models who were his parents. Coleman and DeLeire (2003) identified human capital investment as driving a teenager's decision to invest in their education. Teenagers who believed that their human capital investments or other 'internal' factors had a strong impact on their future opportunities, were more likely to complete high school or attend college, while those teenagers who believed labour market success depended little on human capital investments and more on luck, fate or other external factors were more likely to drop out of high school or fail to attend college. Whilst Max did not drop out of college, his studentship and attendance was low, particularly in Term 3. It is contended that he may have

looked at his parents' experiences where both were successful in roles that did not utilise the higher qualifications they had achieved. His father owned a theatre and his mother owned a shop, so perhaps this partially explained Max's lack of effort as he did not equate academic success to future opportunities. Furthermore, Alias et al. (2016) concluded that self-efficacy was related to effort, and Max had been categorised as having low self-efficacy which could have also contributed to his experience.

Overall, this grouping was the most successful in terms of meeting or exceeding their target grades. They also all shared an internal locus of control and this success and confidence strongly concurs with established locus of control research. However, the inconsistency in formative assessment throughout the year, along with a focus on failure and stress as motivators was surprising. The main inferences include:

- Some students' self-efficacy and confidence is very robust and enduring, despite potential sources of self-efficacy which may act to reduce feelings of self-efficacy in some students.
- Some students actively sought out negative as opposed to positive feedback. Research has suggested that students who have high self-efficacy tend to do this, but Max was categorised as having low self-efficacy, and both Max and Tamara had a strong internal locus of control.
- Motivation could be considered at different levels – motivation to undertake a task, to engage at a process level, motivation to self-regulate and motivation at self-level.
- This grouping's experiences did not concur with established research concerning intelligence which would have anticipated an incremental as opposed to entity view.
- However, research concerning having an internal locus of control in relation to intelligence, self-esteem and neuroticism highly concurred with all three participants' experiences.

5.3 The impact of low self-efficacy and its influence on the target setting experience

The Disregarding Non-Engagers had the same categorisations. Both Emrys and Fabienne were categorised as having **low self-efficacy** and their studentship behaviours and attitudes very much reflected research regarding the impact of having low self-efficacy, although the outcomes that Emrys and Fabienne ultimately achieved were surprising, given their studentship experience across the academic year. The potential impact of low self-efficacy will now be explored by considering the Disregarding Non-Engagers' studentship experience and the inhibiting factors they exhibited, their generally negative enactive mastery experiences, the level of feedback they received and the potential impact of low income on achievement.

5.3.1 Poor studentship and a prevalence of inhibiting factors

Much of Emrys' and Fabienne's dialogue during the interviews reflected the research that identifies academic characteristics and behaviours of individuals with low self-efficacy. For example, Jones (1999) proposed that individuals with low self-efficacy are prone to procrastination, tardiness, avoidance of class or assignments, and failure to seek help. Schunk (2005b) also stated that self-efficacy affected students' motivation and learning in aspects such as the tasks they choose, their exertion and perseverance and many of these behaviours were demonstrated by Emrys and Fabienne. Fabienne and Emrys had the lowest attendance out of the sample, where Fabienne's attendance fell to 78% in Term two, and was only 34% in Term three, which placed her on a studentship warning. Emrys' attendance was only four percentage points off the college's minimum acceptable level in Term two (at 91%) but this fell to 68% in Term three. This lack of motivation was also demonstrated in their assignment completion. Both avoided assignments, with Fabienne failing to submit nearly all her assignments in one subject (AS Criminology) as well as a noticeable decline in assignment submission in Term two, followed by handing in only three assignments in Term three, across all of her subjects. Similarly, Emrys handed in 16 assignments in Term one, eight assignments in Term two and five assignments in Term three. However, neither seemed overly

concerned about their low attendance, assignment completion or that Fabienne had been given a studentship warning and was on Stage 2 of the discipline process. Stage 2 involved her being given a six week period to improve her attendance level to the college's minimum expectation of 95% and to hand all of her assignments in on time. If she did not achieve this, her parents would be invited into college and Fabienne would be placed on a final warning.

Jouhari et al. (2015) investigated factors that affected self-regulation and identified four themes that they termed 'personal inhibiting factors' that detracted from student success and included having a lack of a defined goal, lack of motivation, pessimism and a lack of interest; these factors seemed to reflect Emrys' and Fabienne's attitudes. Neither had a defined goal of where they were headed or what they specifically wanted to achieve; in this respect, to some extent, Coleman & DeLeire's (2003) human capital investment is also relevant, although these researchers linked human capital investment to the locus of control. Coleman and DeLeire (2003) contended that teenagers who believe labour market success depends little on human capital investments and more on luck, fate or other external factors were more likely to drop out of high school or fail to attend college. As discussed in the previous section, Max reflected on the fact that his parents were very successful in their own fields and he felt this was unrelated to his parents' high level of education. Contrastingly, Fabienne's parents left school at 16, yet they became successful as entrepreneurs by establishing a thriving cleaning business that they had been running for over twenty years. Like Max, it is possible that Fabienne's lack of human capital investment was linked to the fact that education did not necessarily contribute to future success. However, she was also aware of the impact of external factors and how these can not only be unanticipated, but can also have serious consequences. Her parents' cleaning business was dependent on both of her parents running it and, as a result of her father being diagnosed with cancer, this was proving very difficult. Her father had only been able to take days off when he had to go to hospital and Fabienne was concerned this pressure was impacting negatively on the family and the speed with which her father was recovering from this serious illness.

Jouhari et al.'s (2015) themes could well be interlinked. Emrys' and Fabienne's lack of a defined goal may have resulted in their lack of motivation as demonstrated by their poor attendance and motivation. Alternatively, a general apathy may have detracted from either student establishing a clear, defined goal for their future. Apathy can also be linked to pessimism and certainly, Emrys and Fabienne exhibited distrust. This was particularly evident in their initial attitude to being assigned a

target grade. Neither accepted their target grade or were willing to engage in the process, hence being categorised as 'Disregarding Non-Engagers'. Emrys was also distrustful in other areas such as his teachers' marking of his work. He mentioned that he always checked the marks his teachers had given him to make sure they had been added up correctly. The low assignment completion and procrastination both experienced could also have been as a result of a lack of interest in the subjects both had selected to study at college, or that the subjects they had selected did not reflect a clear career ambition. For example, Emrys has chosen Religious Studies but did not intend to pursue a religious vocation. Fabienne recognised that her level of interest affected her motivation and related this to her experience of driving. Her goal of learning to drive had a distinct purpose in that she did not want to have to travel on four buses a day in order to get to college, and this situation then resulted in her being highly motivated to achieve this goal. In learning to drive, she also found that she really enjoyed the experience which further affected her motivation to succeed. This experience could be applied to an educational context; thus it can be seen how not having a clear goal can negatively impact on motivation and enjoyment.

5.3.2 Low self-efficacy, student effort and achievement

The lack of motivation and effort, and the participants' acknowledgement of their lack of motivation was particularly apparent. Samiha (a Discouraged Engager) acknowledged a lack of motivation and this seemed to be rooted in her level of confidence, but Fabienne and Emrys did not lack confidence in the same way. Rather they experienced tiredness, apathy and procrastination which may well have been the reason for their poor attendance and low assignment completion. In relation to levels of motivation, as outlined in Figure 24, Fabienne and Emrys lacked motivation at task level, process level and self-regulation level, but Fabienne still felt that everything would be fine in the end which suggests some confidence at self-level. Whilst Fabienne's motivation in terms of attendance and assignment submission (MP and MT) had fallen greatly in the final term, she did not appear to perceive her attainment of grade Us to be a failure. This is surmised due to the order in which she achieved her grades which showed, for example, that in one subject (AS Law) she achieved a grade D, followed by a grade U and then finally a grade A in term 3, thus not apparently losing confidence following her U grade. Likewise, Emrys's experiences were also inconsistent in that

he went from a grade U to a grade A, and then to a grade U in AS Religious Studies. Therefore, they were both resilient as demonstrated by their highly inconsistent grade profile which ranged between a grade U and a grade A, with often these grades being consecutive.

To some extent this highly inconsistent grade profile is at odds with research relating to low self-efficacy. Bandura (1977) claimed that individuals with low self-efficacy will often perceive tasks as more difficult than they are, so spend less time completing the task and give up, which may also accentuate feelings of failure, depression and helplessness. It is interesting to note that Bandura did not specifically relate self-efficacy to outcomes. However, there has been extensive research that has made this link (for example, Akhtar 2012; Li 2012; Shah & Anwar 2014), with some researchers proposing that self-efficacy is the strongest predictor of academic achievement (Soom & Donch 2014). Similarly, research carried out by Schunk (2005b) supports Bandura's claims relating to the impact of self-efficacy in relation to students' motivation and learning in aspects such as the task they choose, their exertion and perseverance, and also relates this to their overall performance.

Bandura considered enactive mastery experiences as being the most powerful contributor to self-efficacy which refers to an individual interpreting whether the results of a task are a success or failure. It can be speculated how a student receiving a substantial piece of work, and then comparing this to their target grade, can promote or reduce enactive mastery experiences, as they may be interpreting whether the results of a task are a success or failure in terms of whether they have met, not met or exceeded their target grade. If they continue to underachieve against their target grade, it can also be surmised that their feeling of self-efficacy will decline, thus resulting in less exertion and perseverance in completing future tasks. However, this experience was not reflective of Fabienne and Emrys, where they achieved a grade U for one piece of work, but were then able to hand in a subsequent piece of work that achieved a grade A. Unlike Samiha, they did not seem to make a judgment as to whether a piece of work was a 'success' or a 'failure' and allow this to affect future effort and achievement, but instead were 'disregarding' and unpredictable in relation to the level of effort and achievement they would put in to their next piece of formative assessment. This disregarding approach led to no self-regulating activity being undertaken (which could be seen as MR), including acknowledging feedback which also seemed to demonstrate their resilience and self-reliance as opposed to reliance on others and ultimately secure motivation in relation to self (MS).

The experiences of Fabienne and Emrys have also been in line with Alias et al.'s (2016) findings. They contended that learning requires both self-perception of being able to succeed on a task (self-efficacy) and a feeling of being in control of the event outcomes (locus of control). Consequently, they hypothesised that having high self-efficacy along with an internal locus of control would lead to greater academic success. However, their research did not support this hypothesis and instead they concluded that while a locus of control is related to academic achievement, self-efficacy is related to effort. This reflected the experience of Fabienne and to a lesser extent, Emrys. Both made little effort over the academic year, yet Fabienne was the most successful student out of the sample in terms of exceeding her target grades by two grades in each subject. Max was also categorised as having low self-efficacy. It is interesting to note in this respect that both Max and Fabienne had a strong internal locus of control; both exhibited low levels of effort but, despite this, they were ultimately successful in their overall outcomes.

Another source of self-efficacy described by Bandura (1977) was a student's psychological, emotion or mood state. If they are feeling anxious or tense, for example, this may act to enfeeble their level of self-efficacy (Pajares 1997). Fabienne's father was diagnosed with a potentially fatal illness which could have led to significant anxiety, but this did not seem to have an impact on her. Both Fabienne and Emrys felt that physiological, emotional and mood state did not really affect them, which was unexpected due to their questionnaire scores. The questionnaires were carried out in the first term of the academic year, where both Fabienne and Emrys would have had a few self-efficacy sources to draw on as there would have been little formative assessed work at this time for them to interpret as positive or negative. Nevertheless, they achieved a low self-efficacy score. In looking back at their formative assessment scores, they were both inconsistent at the start so given both acknowledged that their psychological state did not impact on their feelings of self-belief, and neither experienced consistently low grades, it is puzzling to ascertain their source of low self-efficacy. In order to pursue this further, their initial self-efficacy questionnaires were examined and both shared similarities. The questionnaire required them to indicate how strongly each statement sounded like them with '1' indicating 'not very like them', to '5' indicating 'very like them' and neither Fabienne or Emrys gave higher than a '3', except for the following statement which both gave '5' marks to:

- When I am struggling to achieve something difficult, I focus on my progress instead of feeling discouraged.

This attitude was very apparent in both of their experiences where they did not seem to be negatively affected by the number of U grades they achieved and as seen in their overall resilience.

Similarly, both gave their lowest scores to the following statements:

- I think that no matter who you are, you can significantly change your level of talent in something.
- My ability grows with the more effort I put in.
- I believe hard work pays off.

Following the analysis of Fabienne's interview, it can be speculated as to why she gave these statements a rating of 1. She discussed her experience of maths and how she had genuine difficulties in understanding mathematical concepts. She knew how to carry out some mathematical calculations but did not understand the actual process; instead she had just learnt how to answer a question if she saw a particular phrase. This indicated that she may have been making a link to her experience of maths when she was answering these questions. It is also of note that self-efficacy research suggests that those with low self-efficacy tend to lack effort and exertion, as seen in Fabienne's questionnaire responses above. This was an aspect that was seen in both Fabienne and Emrys over the academic year.

5.3.3 The impact of low income on student achievement

Research also links socio-economic status to self-efficacy and academic achievement, where Sucuoglu (2018) reported academic achievement was lower in unschooled parents and those with low monthly income. Similarly, Strand (2013) sought to undertake research in order to determine which of the factors of gender, socio-economic status or ethnicity had the greatest impact on educational achievement inequalities, and how these factors interacted with one another. He concluded that, at age 16, socio-economic status was the most significant factor contributing to achievement gaps. Nevertheless, this link clearly did not materialise for Fabienne who was the most deprived participant in the sample and the participant who was the most successful in exceeding her target grades.

The Welsh Government's method for determining deprivation status is through postcode and Fabienne lived in an area of the city where house prices are very low. It could be questioned whether postcode does always indicate low income; consequently, deprivation may not always be associated with the place a person lives (as indicated by their postcode).

5.3.4 Shared behaviours and attitudes

Figure 25 illustrates the similar behaviours and attributes exhibited by the Disregarding Non-Engagers. It can be seen that these are very different to the behaviour and attributes exhibited by Encouraged Engagers and Discouraged Engagers.

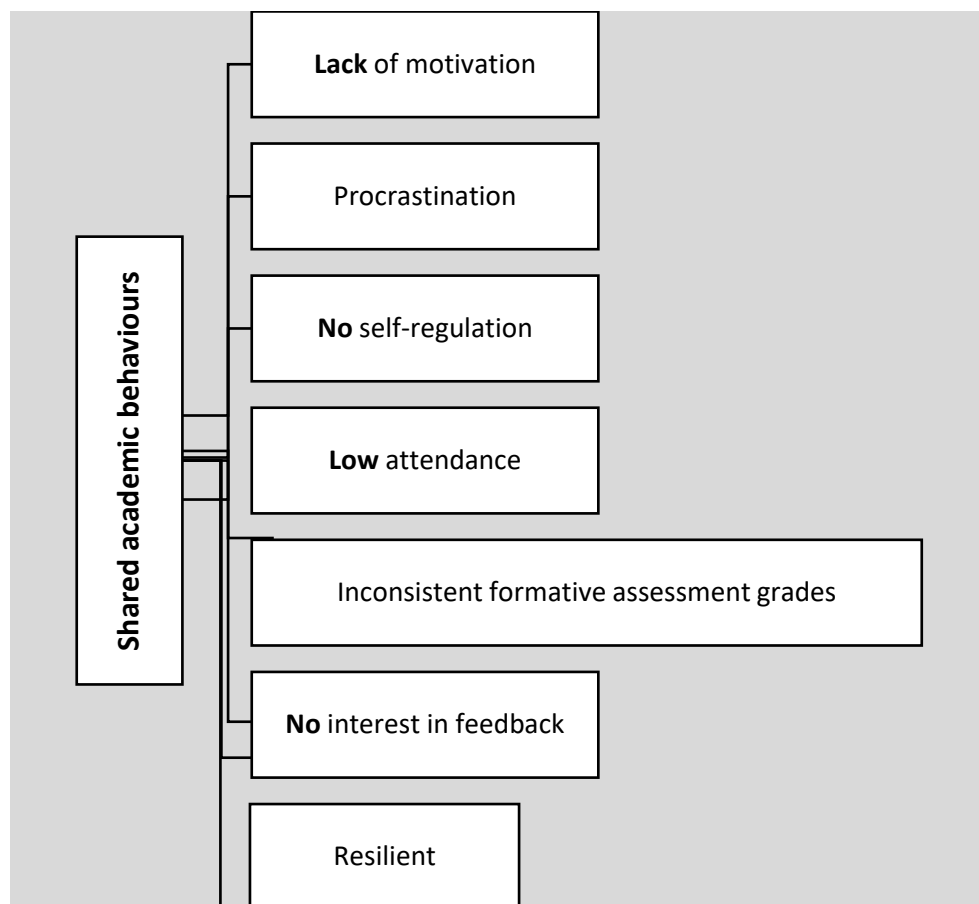


Figure 25: Overview of Disregarding Non-Engagers and their shared academic behaviours

Overall, both Emrys and Fabienne's studentship behaviours mirrored established research involving students with low self-efficacy. Nevertheless, despite these commonly perceived 'negative' academic behaviours, there was no significant detrimental impact on actual achievement which established research would not predict. Academic behaviours such as procrastination, lack of motivation and low attendance have been associated with lower outcomes, but Fabienne significantly exceeded her target grades and Emrys achieved most of his target grades. Both Fabienne and Emrys also demonstrated considerable resilience in terms of moving on from the number of U grades they achieved. Therefore, this grouping is of particular interest in that their outcomes were so positive despite poor attendance, little or no self-regulation, perceived 'negative' academic behaviours associated with low self-efficacy and Fabienne's deprivation classification. Overall, the main inferences include:

- In some cases, outcomes cannot be predicted.
- Sources of self-efficacy may have more influence on some students than others.
- Low self-efficacy may result in students demonstrating similar academic behaviours and these behaviours may be perceived as undesirable (such as procrastination, failure to meet deadlines and low attendance). Nevertheless, such undesirable behaviours may not impact on outcomes.
- Low self-efficacy may have more of an impact on effort.
- Deprivation also did not seem to affect outcomes.

5.4. The impact of self-efficacy and its influence on the target setting experience

Two of the Discouraged Engagers had some similar categorisations. Both Ryan and Carl had been classified as having high self-efficacy. The third Discouraged Engager (Samiha) had been categorised as having an external locus of control and is discussed in the next section. The potential impact of high self-efficacy is now explored by considering the studentship experiences of the Discouraged Engagers Ryan and Carl, in terms of social persuasions and enactive mastery experiences, personal facilitating factors and shared studentship attitudes and behaviours, and the use of feedback and ability to self-regulate.

Bandura's (1977) construct of self-belief seems highly pertinent in considering the experiences of this grouping, where he described the impact of self-belief as *'the higher the level of self-belief, the more likely a person is to achieve their goals'* (p3). Therefore, the fact that Carl and Ryan had been categorised as having high self-efficacy was promising in terms of the likelihood of them achieving their target grades. Bandura also stated that people with high self-efficacy will choose activities which they feel themselves capable of undertaking and avoid others where they lack capability. Thus, it seemed that each participant with high self-efficacy had made a judgement based on their beliefs as to whether the targets were appropriate or not. As described in the previous chapter, Carl and Ryan were dissatisfied by the target grades they had been given and had instead 'chosen' higher grades to aim for, based on what they personally felt they were capable of. Target setting research suggests that if students have targets or goals they will be more likely to attain them because goal setting is a motivational experience (Pintrich & Schunk 1996), but Carl and Ryan's experience suggests that the assumption of being assigned a goal or target is not always motivational. Rather, some students need to believe that the targets to which they have been assigned are appropriate and achievable for them to feel motivated to achieve them. For this grouping of students, discouragement arose as a result of perceiving that their targets were inappropriate and this discouragement could have impacted on their self-belief and overall attainment.

Being assigned a target grade could be considered as an example of Bandura's social persuasion that can promote an individual's level of self-efficacy if it is a positive social persuasion. However, equally, a negative social persuasion could potentially have reduced their beliefs in their *'capabilities to organize and execute the courses of action required to produce given attainments'* (Bandura, 1977, p3). Nevertheless, while Carl and Ryan were discouraged, they were later able to perceive this discouragement as a motivator to exceed the grades that they had been given. Bandura stated that the enactive mastery experiences are the most powerful contributor to self-efficacy, and this may have manifested in Ryan's and Carl's ability to move on from their initial discouragement. Enactive mastery experiences refer to an individual interpreting whether the results of a task are a success or failure. It can certainly be speculated how a student receiving a grade for a substantial piece of work, and then comparing this grade to their target grade, can promote or detract from enactive mastery experiences. From the outset of the academic year, Ryan's formative assessment showed an overachievement across each subject, which may have

promoted his enactive mastery experience, which in turn inflated his self-belief and enabled him to move on from his initial discouragement. Carl's experience was also similar to Ryan's in that, from the outset, he was generally achieving higher grades than his targets (although not to the extent of Carl), which again may have also promoted his enactive mastery experience, thus inflating his self-belief and enabling him to move on from his initial discouragement. This secure self-belief was also seen when asked about their mental state (in relation to their emotions and feelings) and how it affected performance. Both stated that their mental state did not impact on their performance, but gave examples of how they could appreciate that feeling stressed or anxious could affect others. It is interesting to note that Ryan and Carl interpreted 'mental state' as a negative positioning, but perhaps their very positive mental state was, in fact, impacting upon their performance and success.

Ryan and Carl's studentship experience also supports extensive research that links high levels of self-efficacy to behaviours that promote positive academic achievement. Students with high self-efficacy are able to plan and manage their time more effectively (Zimmerman 1995), which could be seen in Ryan and Carl's assignment completion, grades achieved on formative assessment and overall attendance levels. Cardon et al. (2004) further concluded that students with high self-efficacy also tended to take on challenges more readily, set long term and medium term goals, and use strategies to attain them. This again was supported in that both Ryan and Carl set themselves more challenging targets than the ones they had been assigned. Furthermore, they both discussed strategies they employed in order to achieve these targets. For example, Ryan had created an out-of-college timetable so he was able to effectively manage his time in completing homework. Many students create revision timetables near to exams, but to adopt this practice so early on in the academic year demonstrated not only his commitment to achieving his goal, but also an awareness of developing an effective strategy in order to do this.

Figure 26 provides an overview of the academic behaviours and attitudes shared by these two Discouraged Engagers. Despite being disappointed with their initial target grades, they were both able to get past this disappointment and set their own more challenging targets which seemed to demonstrate confidence in their perceived ability. Therefore, as opposed to lacking confidence, both Carl and Ryan were confident that they could exceed the target grades they had been set. This belief was actually substantiated through their self-regulation experience, where they generally met or exceeded their targets. They also felt their mental state would not impact on their

performance, where they perceived mental state with negative connotations. Their references to mental state described stress and anxiety, for example, and they both commented on how they had observed their classmates experiencing these emotions and it then influencing negatively on their classmates' grades. They did not see that their own robust levels of confidence could be considered as a mental state and how this actually was impacting in a positive manner. On receiving grades back from formative assessments, they also compared themselves to their classmates, which may have contributed to the confidence they felt. This confidence may have been reinforced across the academic year by the consistent grades they were achieving on their formative assessment that further bolstered their motivation as demonstrated by their very high attendance levels. Ryan and Carl clearly exhibited Jouhari et al.'s (2015) personal facilitating factors of being motivated, feeling that your actions affected your success, having high self-esteem, self-efficacy and personal desire, which impacted positively on their self-regulated learning.

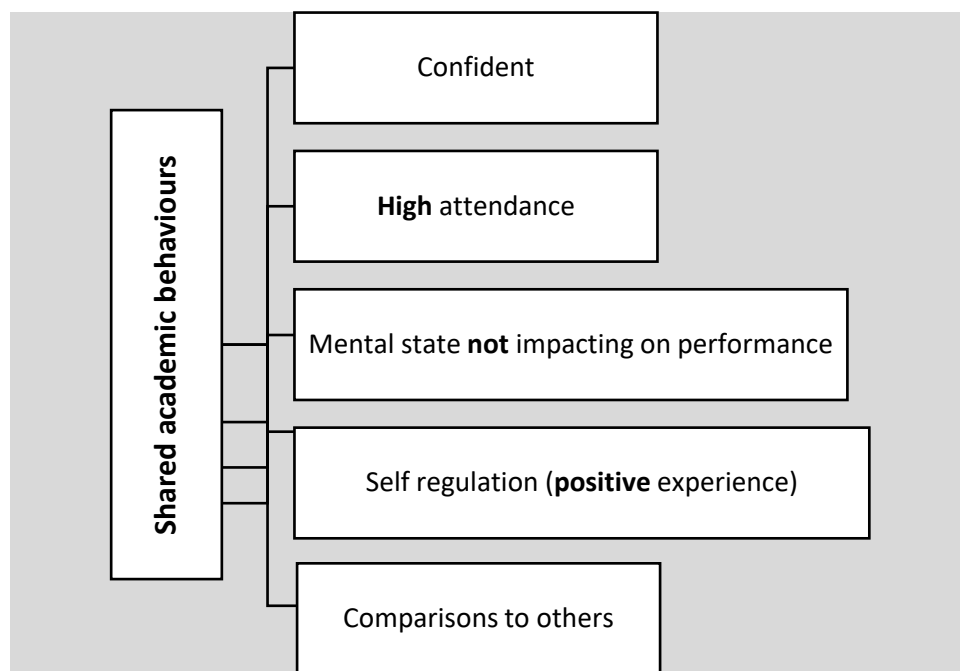


Figure 26: Overview of Discouraged Engagers and their shared academic behaviours

5.4.1 High self-efficacy and the use of feedback and self-regulatory practice

Ryan and Carl were able to self-regulate by not only comparing their target grade to their achievement grades on every piece of formative assessment they completed, but also by engaging

with feedback from their teachers and classmates, and using these sources to develop their knowledge and understanding. These actions can be linked to Hattie and Timperley's (2007) self-regulation level (in their model of feedback to enhance learning) where they contended that self-regulation concerns students' commitment, control and confidence to achieve a learning goal which requires autonomy, self-control, self-direction and self-discipline. Both seemed to possess these attributes as well as embracing feedback that they were given. Hattie and Timperley (2007) also identified a number of factors that influenced the effectiveness of feedback which, again, both seemed to concur with. For feedback to be most effective, students should be able to create internal feedback and have the confidence and capability to self-assess themselves. This can be done through students evaluating their levels of understanding, effort and opinions from others and assessing their performance relative to others, which both Ryan and Carl described that they undertook. Hattie and Timperley (2007) also regarded the willingness to invest effort into seeking and dealing with feedback as important, along with the proficiency of seeking help. This was seen where Carl, for example, stated that getting feedback was vital and often he went to his teachers for additional clarification and support. Kulhavy and Stock (1989) identified that feedback was most impactful when a student provides a response that is incorrect, but they had expected it to be correct. Furthermore, Swann et al. (1988) contended that students with high self-efficacy were more likely to seek unfavourable feedback in order to excel at tasks, and again this was substantiated by both Carl and Ryan, where Ryan, for example, stated that negative feedback was better because *'it tells you how to do something better the next time you do it'*.

5.4.2 The impact of low self-efficacy and an external locus of control and its influence on the target setting experience

Samiha's questionnaire result indicated she had an external locus of control. Her self-efficacy was also identified as being low.

An external locus of control is linked to a greater likelihood of dropping out of school (Coleman & DeLeire 2003), being less adaptive, less likely to cope with stress and more likely to experience procrastination (Deniz et al. 2009). As Coleman and DeLiere described, Samiha's external locus of control belief may have perpetuated the perception that labour market success depends little on

human capital investments and more on luck, fate or other external factors. As a result, this belief could impact on motivation levels which then manifests in poor attendance and low achievement grades which did seem to mirror Samiha's experience. In the first term, Samiha achieved 4 grade Us, 2 grade Ds and 2 grade Es, (where her target grade was actually a grade C). This meant that three quarters of the grades she gained in the first term were below her target grade, and half of these grades were fails. Consequently, in conjunction with being categorised as having an external locus of control and feeling discouraged as a result of receiving target grades that she perceived as inappropriate, Samiha's negative enactive mastery experiences could have further reduced her feelings of self-efficacy. Bandura explained three further sources of self-efficacy and these could have also lessened Samiha's self-belief. Her vicarious experiences would have been most likely negative experiences as it would be probable that her classmates would be achieving higher grades than her Us, Es and Ds. Social persuasions would probably be lacking because teachers would not be in a position to encourage Samiha because they did know her very well after just one term, so would be unfamiliar with her potential capabilities. Her psychological mood state was also insecure as Samiha stated that she was very worried and Bandura contended that mood could detract from self-belief. Therefore, all four of Bandura's sources of self-efficacy seemed to be contributing negatively to Samiha's self-belief and overall experience at college.

Not only the grades that Samiha was receiving, but the type of feedback that she was experiencing could have further exacerbated the experience. It seemed that Samiha was receiving feedback related to the task and not necessarily to the processing or regulation, as she talked at length about difficulties in these areas but was unclear as to what she needed to do to improve. She stated that, unlike Carl and Ryan, she did not have a learning strategy and did not know what worked. She also stated that she did not know what to do other than know her responses to formative assessments such as essays or short answer questions were weak. Hattie and Timperley (2007) stated that the purpose of feedback was primarily to reduce discrepancies between current understanding and or performance and the desired goal, and this discrepancy can be reduced in two ways. Students can either increase their effort and employ more effective strategies, or they can abandon, blur or lower their goals. It could be surmised that Samiha had adopted the latter route.

In comparison, Carl explained that he had a strategy and he knew what he had to do to improve as his teachers often revisited questions and talked about how to approach the questions as opposed to just focusing on the answers. Hattie and Timperley (2007) also stated that there were particular

aspects that influenced the effectiveness of regulatory feedback which included the capability of students themselves to create internal feedback and to self-assess, which could be achieved by evaluating levels of understanding, effort and performance in relation to others. Carl and Ryan stated that they regularly compared themselves to others whereas Samiha did not do this as she was upset and frustrated with the grades that she had achieved and could see no benefit in then comparing them to others.

Whilst an advocate for the merits of target setting, Martinez's (2001) paper collated a number of objections to target setting that may result in a student not achieving their potential. One of these objections was that *'Realistic targets for lower attaining students will be demotivating and may actually lead to lower achievement and even withdrawal'* (p3). This objection may have manifested in Samiha's experience. Having been categorised as having an external locus of control, Samiha's perception of herself may have been based on external as opposed to internal factors, so being assigned low grades may have negatively affected her self-worth. Martinez (2001) also identified that target grades may invoke a self-fulfilling prophesy, where a student with a low target grade may work down to their teacher's low expectation of them. This may have also been a feature of Samiha's experience. In contrast, Ryan and Carl had both been categorised as having a high level of self-efficacy so were able to draw on their belief that they were ultimately responsible for the grades they achieved.

There were few shared attributes and behaviours between Samiha, Carl and Ryan. One of the most noteworthy findings was that Samiha's discouragement seemed to act as a demotivator, while Ryan and Carl's discouragement appeared to act in contrast and possibly reinvigorated them to achieve better outcomes than the ones they were predicted. Figures 26 and 27 illustrate the distinct differences in studentship behaviours between Samiha, Carl and Ryan. Figure 27 reveals that Samiha lacked confidence, felt stress and worry and experienced a negative self-regulation experience, which may have contributed to her low attendance that was particularly apparent in the final term of the academic year where it dropped to 71%, which was the third lowest level out of the sample.

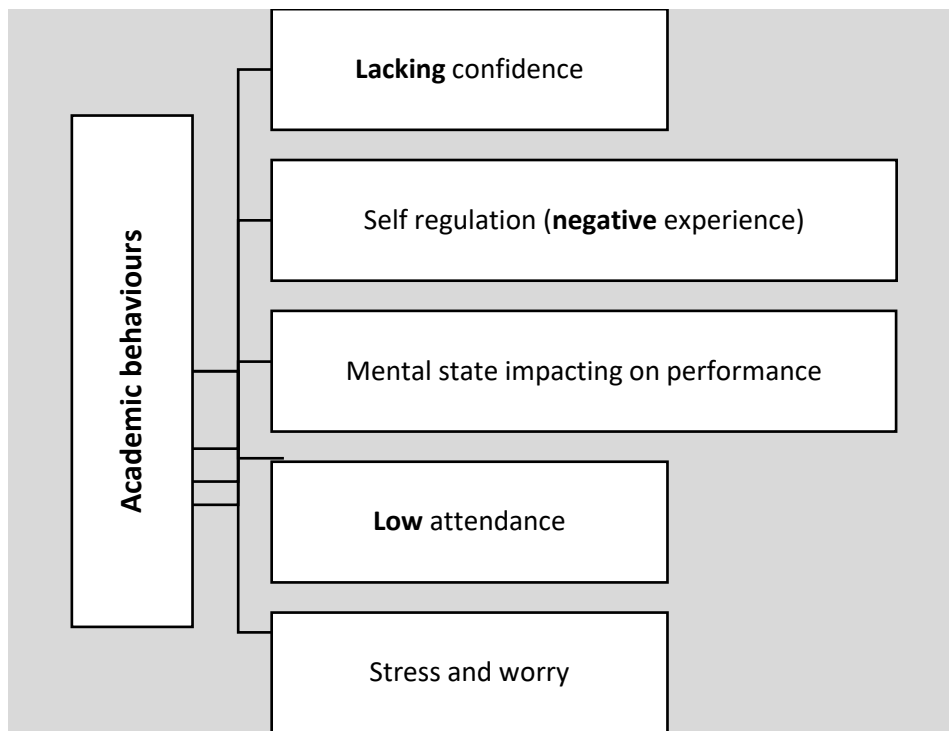


Figure 27: Overview of Samiha's academic behaviours

In summary, initially all three students, whilst engaging in the target setting process, experienced an initial discouragement. However, this grouping's experiences revealed how sources of self-efficacy can act to motivate or demotivate, and warrants further research into the experiences of students who have an external locus of control in conjunction with low self-efficacy, and who also consistently fail to achieve their target grades. Therefore, the main inferences from this grouping include:

- Realistic targets for lower attaining students may be demotivating for some, but this may be dependent on a student's self-belief.
- Assigning a target grade may be better if it were of a more negotiated process as advocated by Martinez (2001).
- Some students may consistently underachieve against their target grades, and this may negatively affect self-belief and lead to withdrawal from a course or failing to achieve potential. This leads to questioning whether the target setting and self-regulatory practices that are advocated through a universal target setting process are fit for purpose.

- Students with high self-efficacy may find target setting and the corresponding self-regulatory aspect more motivating than students with different views.
- The impact of having low self-efficacy and an external locus of control may exacerbate student behaviours, attitudes and overall outcomes.

5.5 When types of self-belief have no discernable impact

The Encouraged Engagers: Lloyd, Catherine and Beth were all categorised differently, based on their questionnaire results:

- Lloyd had a strong **internal locus on control**
- Beth had a strong **external locus of control**
- Catherine was classed as having **high self-efficacy**.

This grouping may demonstrate that in some instances, a particular level of self-belief may have no discernible impact on the target setting process. These students typified the assumed response that the college's target setting would instigate. Engagers described those participants who, from the outset, accepted the target setting process. Whilst some of them did not understand how the target grades had been set or who had set them, they were still accepting that this was a legitimate process with which they should engage. They were also encouraged by their target grades and expressed satisfaction with the level they had been set, as well as believing they were achievable.

However, neither Catherine nor Beth's experiences concurred fully with the expectations that self-belief research would predict, although both exhibited some of the behaviours and attitudes that have been documented. Lloyd's experience was more akin to the outcomes described in literature and each participants' experiences will now be analysed in more detail.

Lloyd and Beth had opposing results following the locus of control questionnaire, and as described in the Literature Review, the locus of control has been extensively attributed to academic achievement and academic behaviours. An internal locus of control indicates that Lloyd would be likely to believe that the environment was responsive to personal agency and that outcomes, such as incentives or punishments, could be predictably obtained. This acts in emphasizing the belief

that he is in control, as opposed to being subject to fate and/or chance. Individuals with a strong internal locus of control are deemed to be more likely to achieve higher grades (Nordstrom & Siegrist 2009) and to complete work before deadlines (Janssen & Carton 1999) whereas individuals with an external locus of control such as Beth, perceive an inability to control the environment. They will view negative outcomes in academic tests, for example, as out of their control so they may exert less effort to produce academic success and may become helpless when faced with academic failures (Dweck & Leggett 1988). Research also suggests that individuals with an external locus of control tend to have lower intelligence, lower self-esteem, higher neuroticism, more behavioural problems and come from homes of lower social class and less well-educated parents (Furnham & Cheng 2016b). In relation to the target setting process, it could be postulated that Lloyd (with an internal locus of control) would be more likely to engage in self-regulatory behaviour than compared to Beth (with an external locus of control) who may be more dismissive, as she may not consider herself as primarily responsible for the grades she achieved.

This prediction was somewhat substantiated as Lloyd displayed many attitudes, behaviours and outcomes as predicted for individuals who have an internal locus of control. He accepted the target setting policy and engaged in self-regularity behaviour, as well as exhibiting confidence, self-esteem and demonstrated no behavioural issues. His experience of formative assessment was generally positive and again, as research would predict. For example, during the first two terms of the academic year he met all of his deadlines and achieved or exceeded his target grades for each subject. However, in Term three, where his attendance was the lowest (although only slipping by six percentage points - 96% in Term one to 90% in Term three), he performed at one grade under his target grade in two subject areas which were AS Art and AS Media. Nevertheless, he ultimately achieved all of his target grades.

5.5.1 External locus of control, mental state and deprivation

According to the literature, an external locus of control would predict lower intelligence, lower self-esteem, higher neuroticism and more behavioural problems. Whilst not all of these are relevant, out of all the participants Beth experienced the greatest psychological barrier where she discussed at length how mental state affected her effort and performance. When she was not feeling

mentally strong, her college work would suffer. In concurrence with external locus of control findings, she felt strongly that situational factors such as the quality of the teaching and environmental factors such as home-life arrangements impacted on overall outcomes as well as her mental state. Beth had recently received support from a counsellor and this had positively aided her mental state where she was able to re-engage with learning. Beth also experienced a much less consistent experience in terms of grade achievement over the academic year, where her grades slipped in relation to her mental state, but she ended up overachieving in two subjects and matching her target grade in her other subject. This was not only a significant outcome in terms of the psychological difficulties she had experienced, and contrary to external locus of control research, but also because both Lloyd and Beth were classified as deprived and research suggests deprived students do not achieve as successfully as their non-deprived counterparts.

5.5.2 High self-efficacy and subject choice

Catherine had been categorised as having a high level of self-efficacy and extensive research has suggested that high self-efficacy is one of the strongest predictors of academic success where it is seen as positively impacting on students' motivation and learning in aspects such as the tasks they choose, their exertion, perseverance and overall performance (Schunk 2005b). As described in Section 2.8, Bandura (1977) outlined four main sources of information that create students' self-efficacy: and physiological/ psychological states and Catherine's experience will now be considered in conjunction with how these sources could have promoted or lessened her feelings of self-efficacy. Catherine's experience concurred with Schunk's (2005b) research in terms of attendance, assignment submission and consistency of formative assessment grades. Her attendance was 99% in Term one, 100% in Term two and 98% in Term three, which was the second highest attendance of all the participants within the sample. She also handed in thirty-two pieces of work over the academic year which was the third highest. For one of her subjects – AS Psychology, her enactive mastery experience was highly positive where she consistently met or exceeded her target grades but for AS Chemistry she generally underachieved across the academic year. In AS Maths, her Term one experience was positive in that she met or exceeded her target grade, but in Term two she did not meet her target grade and in Term three her average grade profile fell even lower. Her feelings of

self-efficacy may have lowered in Term two following less positive enactive mastery experiences, vicarious (observational) experiences of her classmates' success and social persuasion in the form of less positive feedback from her teacher, which all manifested in declining confidence levels. Schunk and Parjares (2010) contended that individuals must believe that they can actually achieve their desired goal, and if they lack confidence this will result in less motivation to act in the perceived challenging situation. This may have been Catherine's experience where her confidence was declining over the academic year, and this was then affecting her attainment.

However, in contrast to the Maths experience, her AS Biology experience began in Term one with Catherine not meeting her target grade, but in Term two her grades improved with Catherine achieving her target grade in Term three. Catherine's belief that she could actually achieve her desired goal in AS Biology may have been endorsed by her improving enactive mastery experiences in this subject. Catherine believed in order to achieve her target grades she needed to work hard. She mentioned this point many times and talked about the strategies that she had employed including the use of a revision planner and a target of completing two hours of study every night. This concurs with Zimmerman (1995) and Carden et al.'s (2004) findings that individuals with high self-efficacy are able to plan and manage their time more effectively and are more likely to set long term and medium term goals and use strategies to attain them. However, despite her work ethic, she went on to underachieve in two subjects but overachieve in her other subjects. Catherine knew from the outset that she found two of her subjects difficult which has implications for initial subject choices as commented in Chapter 6, section 6.6.

5.5.3 Encouraged Engagers shared attitudes and behaviours

In terms of the Encouraged Engagers studentship behaviours, despite having different self-belief categorisations, this group engaged in the target setting process as the college's policy described and advocated. There were many shared academic behaviours exhibited by each of the participants as shown in Figure 28 below.

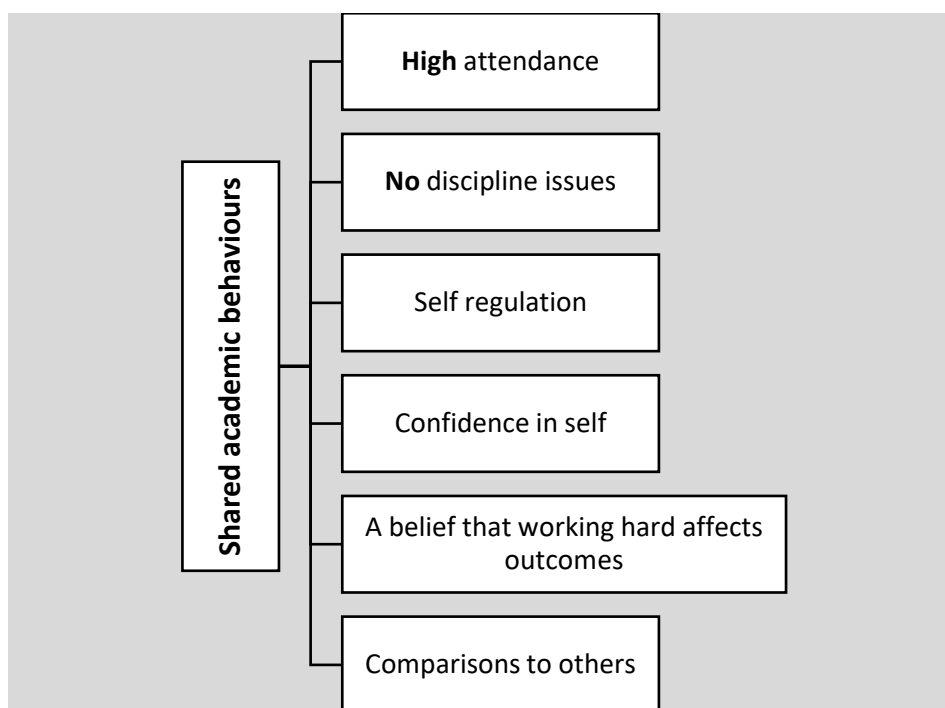


Figure 28: Overview of Encouraged Engagers and their shared academic behaviours

Overall, the Encouraged Engagers all maintained high attendance and were never subject to the college's studentship process (which involved a series of stages and expectations that had corresponding consequences). They fully engaged with the target setting process, and could be considered as fulfilling the expectations of the college target setting policy. They all engaged in self-regulation although Beth was less resilient than Catherine and Lloyd in receiving negative feedback, but they all shared the belief that working hard was fundamental to the achievement of goals. They were all confident and motivated from the outset and this confidence and motivation was sustained for Beth and Lloyd; however, Catherine found two of her subjects difficult and this was reflected in her varying confidence levels.

The main notable inferences arising from this grouping include:

- The only participant from this grouping that did not fully achieve her target grades had been classified as having high self-efficacy. This was unexpected as research predicts students with high self-efficacy will achieve academic success. However, Catherine did demonstrate the academic behaviours that theory predicts, but struggled with two of her subjects from the outset, despite considerable effort. These subjects were Maths and

Chemistry and this may indicate that she did not initially select subjects that matched her skills set.

- Beth had been classified as having an external locus on control and her experiences concurred to some extent with established research. Her belief that situational factors such as the quality of the teaching and environmental factors such as home-life arrangements and mental state impacted on overall outcomes was in contrast to Lloyd and Catherine who believed they were ultimately responsible.
- Deprivation did not seem to impact negatively on outcomes as demonstrated by Lloyd and Beth.
- Lloyd demonstrated the attitude, behaviours and outcomes that locus of control research would predict.

This chapter has examined the extent to which self-belief may have impacted on perceptions, experiences, academic behaviours, attitudes and actual outcomes of each grouping described in Chapter 4. It has concluded that some findings described in the previous chapter concurred with established research concerning target setting theory, the locus of control and self-efficacy; especially in relation to the Discouraged Engagers, Disregarders and Autonomous Non-Engagers. The experience of Discouraged Engagers revealed how target grades not only motivate but may also demotivate. Indeed, the demotivation experienced by some students can create a cycle of discouragement that can then impact on outcomes. This finding warrants further research into the experiences of students who have an external locus of control in conjunction with low self-efficacy and consistently fail to achieve their target grades. The Disregarding Non-Engagers were categorised as both having low self-efficacy and both demonstrated academic behaviours that established self-efficacy research had documented. Therefore, students with low self-efficacy may be more inclined to demonstrate certain academic behaviours and these behaviours may be perceived as undesirable (such as procrastination, failure to meet deadlines and low attendance). Nevertheless, such undesirable behaviours may not impact on outcomes as Fabienne in particular demonstrated. Autonomous Non-Engagers were categorised as having an internal locus of control, and like Disregarding Non-Engagers, participants also demonstrated academic behaviours that established locus of control research had documented, particularly in relation to greater intelligence, higher self-esteem and lower levels of neuroticism.

Furthermore, there were implications raised which are discussed further in the next chapter. These implications concern feedback and how it may enhance but also detract from the students' experience, and implications relating to the motivating, but also sometimes demotivating experience students may have in relation to the targets they are set and their degree of ownership.

In conclusion, this discussion has analysed the experiences of each grouping and drawn out many inferences from the participants' experiences. It has illuminated how self-belief can impact on perceptions, experiences, academic behaviours and attitudes which can also be seen to influence academic outcomes. The act of target setting may promote self-belief or reduce it, and this then strengthens or exacerbates students' learning experience. The next section focuses on moving the inferences to conclusions and resulting implications for policy makers, teachers and tutors and students themselves.

Chapter 6: Conclusions, implications and recommendations

6.1 Introduction

This final chapter draws together the main findings of this research which has attempted to describe and analyse the experience of target setting with twelve students over an academic year. The underlying premise that has emerged from the research is that students are unique and the meanings, interpretations and ultimately actions that they create and act on in response to college policy initiatives cannot be assumed to be the same for all. The next section will address each research question by summarising the findings and related discussion, as well as stating the main conclusions from this research. The implications for senior leaders, classroom teachers and tutors as well as students themselves will also be considered. The chapter describes the reflexive consideration of the researcher's positioning in terms of the context for this research and the motivation to focus on this topic, along with engagement with the literature, data collection and methodological reflections and effectiveness of data collection tools and data analysis. It then considers the perceived overall strengths and limitations of this research, and concludes by explaining the influence of the research study on professional practice and final comments.

6.2 Addressing the research questions

The research questions for the study were:

- 1. What are student experiences of a target setting process?**
- 2. What academic behaviours and attributes are exhibited following the implementation of a target setting process?**
- 3. Are students who engage in the target setting process more likely to achieve their target grades?**

In terms of student perceptions of target setting, the findings revealed that all participants could be described as either 'Engagers' or 'Non-Engagers'. Engagers described those students who, from the outset, accepted the target setting process. Whilst some of them did not understand how the target grades had been set or who had set them, they were still accepting that this was a legitimate process which they should engage with. However, the Engagers differed in terms of whether the target grades they were given acted as a motivator or disappointed them, and this difference led to the descriptors of the 'Encouraged Engager' and the 'Discouraged Engager'. Contrastingly, Non-Engagers described those students who expressed that they would not engage or commit to the target setting process. Their reasons differed and led to the descriptors of 'Disregarding Non-Engagers' who entirely disregarded the target setting process, including the premise of being assigned target grades, and 'Autonomous Non-Engagers' who were described as such due to their looking beyond the target grades approach. These students considered the targets that they had been assigned as largely irrelevant since they had their own end goals which looked ahead of the short term notion of achievement of grades.

These findings led to questioning whether the targets that students are currently set are appropriate for all students. The word 'target' is used interchangeably with the word 'goal' and it appears that a teacher ascribing a grade (A, B, C, D or E) to a student as a goal is not necessarily a shared vision. This research has shown that for some students such as the Autonomous Non-Engagers, a grade as an actual 'goal' is too short term and narrow, and instead their goal is based on a much longer term and broader ambition. Likewise, Disregarding Non-Engagers also did not accept a grade as being their goal. As stated in Chapter 2 - Section 2.6, Martinez (2001) stated that *'targets need to be negotiated and agreed with the tutor but owned by the student. This ownership has cognitive, emotional and motivating elements'* (p2). Autonomous Non-Engagers and Disregarding Non-Engagers did not own their targets, but Encouraged and Discouraged Engagers did, and the emotional and motivating elements were clearly observed. Nevertheless, this was not always a positive experience as the level and type of self-belief seemed to impact on this experience. This was seen particularly in the Discouraged Non-Engager's category where one student with low self-efficacy and an external locus of control found the experience of being unable to achieve her target grades to be frustrating, demotivating and ultimately negative. The criticism of reductionism has been levied at target setting policy, as described in Sections 2.4 and 2.6, and perhaps this is where more emphasis is needed in developing a more 'fit for purpose' target setting

policy. In setting a target, this implies a narrowing of the many and varied purposes of learning and corresponding feedback. A teacher providing a grade, and then a student comparing the grade they receive to their target grade is akin to feedback at task level. However, to be most effective, feedback also needs to inform process and self-regulation levels. Current target setting practice focuses on the grade as being the main indicator of success or failure, and this, it is contended, is a reductionist approach.

The second research question focused on the academic behaviours and attributes which are exhibited during the target setting process. Advocates of target setting believe that by setting an aspirational but achievable target, students will be academically challenged which, in itself, should act as a motivator for them to learn. Therefore, they will display or limit academic behaviours and attributes which research has suggested enhances or detracts from learning. This research, however, found that some of the groupings not only had similar perceptions and experiences of target setting, but also demonstrated similar academic behaviours. This was particularly noticeable in the Disregarding Non-Engager grouping and the Autonomous Non-Engager grouping.

Disregarding Non-Engagers had been categorised as having low self-efficacy and in terms of shared academic behaviours, their lack of motivation and the acknowledgement of their lack of motivation was particularly apparent. Neither student seemed to lack confidence, but they experienced tiredness, apathy and procrastination which led to poor attendance and assignment completion. Nevertheless, they were both resilient as demonstrated by their highly inconsistent grade profile which ranged between a grade U and a grade A. Their disregarding approach led to no self-regulating activity being undertaken, including acknowledging feedback, which also seemed to demonstrate their resilience and self-reliance as opposed to reliance on others.

Autonomous Non-Engagers were categorised as having an internal locus of control and also demonstrated similar academic behaviours. All three participants shared a secure long term vision and an entity belief in relation to intelligence where they regarded some people to possess more intellectual capacity than others. This finding has also reinforced a perceived criticism of Dweck's fixed and incremental intelligence theory in that it does not fully recognise innate intelligence. The Autonomous Non-Engagers did not especially exhibit a 'growth mindset' but were simply more confident in comparison with other students of their innate ability. Dweck's research would have predicted them to have an incremental intelligence belief, but because of this belief in their innate ability, they actually displayed much more of an entity belief. Their self-regulatory behaviour's

starting point was not on the grade that they had been given, but on the areas where they had underperformed, which was in stark contrast with the self-regularity behaviour exhibited by the Engagers. Perhaps the most noticeable feature of this grouping was their inner confidence that was very secure.

Of the Engagers, the Encouraged Engagers all maintained high attendance and were never subject to the college's discipline process (which involved a series of stages and expectations that had corresponding consequences). They all engaged in self-regulation and shared the belief that working hard was fundamental in the achievement of goals. They were all confident and motivated from the outset. There were less shared behaviours in the Discouraged Engager subset, where two of the participants displayed academic behaviours similar to the Encouraged Engager, but one participant found herself in a cycle of discouragement. This was characterised by a lack of confidence, mental health issues, low attendance, stress and worry.

Section 5.2.5 presented a model of motivation which suggests that students' motivation can be seen at different levels, and when students state that they are motivated, they may be describing their motivation to a task, process, a self-regulation element or themselves in general. Some students can be very motivated at self-level, but lack motivation at task level. Other students may attribute more importance to self-regulation, but are less concerned at process level. This was seen particularly in the Autonomous Non Engager's category where they were highly motivated at self-level and self-regulation level, but were unconcerned if they failed to hand in some tasks, or maintain a high attendance level. Encouraged Engagers were very motivated at task level and process level, but did not share the same level of motivation at self-level. Motivation at the self-regulation level seems difficult to achieve for some students who lack confidence in their ability, and becomes exacerbated if they receive formative assessment feedback that substantiates this. Motivation at task level, process and self-level then diminishes.

Overall, the academic behaviours and attributes that were exhibited following the implementation of a target setting process were varied across each grouping. Some groupings displayed more academic behaviours and attitudes that existing literature suggests promotes learning and ultimately attainment, while some groupings displayed academic attitudes and behaviours that would be seen to detract from the learning experience. Consequently, the final question focused on whether students who engaged in the target setting process were more likely to achieve their target grades. The most successful student did not engage in the target setting process or display

many of the academic behaviours regarded as enhancing learning. Nevertheless, in terms of her attitude, she was both confident and resilient which may have contributed to such successful outcomes. The most successful grouping also did not engage in the target setting process, but they clearly had ownership of their longer term goals and all possessed high levels of self-esteem and inner confidence that seemed very secure. Nevertheless, of the students who did engage, most were successful in meeting at least one of their target grades, but to conclude that they were the most likely grouping to achieve is not substantiated by the overall outcomes.

The main conclusions arising from addressing these research questions are stated below. They focus on four areas which include conclusions about setting targets, conclusions about promoting studentship behaviours and attitudes, conclusions about providing feedback and conclusions about achieving successful outcomes. These conclusions are then considered in the light of possible implications for policy makers, teachers and students.

6.3 Conclusions

The main conclusions from this research relate to setting targets, promotion of studentship behaviours and attitudes, providing feedback and achieving successful outcomes which will be described below.

6.3.1 Setting targets

The main conclusions arising from this research regarding the setting of targets are as follows:

- To promote the effectiveness of target setting, students need to own their targets. However, this ownership **may** be (but not necessarily is) influenced by their self-efficacy or locus of control beliefs.
- Assigning a target grade could be better if it were part of a more negotiated process.
- Realistic targets for lower attaining students may be demotivating for some, but this would be dependent on a student's self-belief.

- Some students may consistently underachieve against their target grades, and this may negatively affect self-belief and lead to withdrawal from a course or failing to achieve potential.
- Students with high self-efficacy can find target setting and the corresponding self-regulatory aspect more motivating than students with different views.

These conclusions emphasise the psychological, emotional and cognitive aspects in undertaking target setting. Assigning a grade is akin to making a judgement about a level of ability, before an individual has embarked on a programme of study. In some cases, students take ownership of these grades, which can be highly motivating but in some cases it is demotivating, especially if the grade is below the students' expectation of what their grade should be. It is also demotivating if a student consistently fails to achieve their target grade. Some students take no ownership of a target grade and it is simply disregarded.

6.3.2 Promoting studentship behaviours and attitudes

The main conclusions arising from this research regarding the promotion of studentship behaviours and attitudes include:

- Academic behaviours exhibited **may** reflect existing research. However, certain academic behaviours that are considered as undesirable, **may not** impact negatively on outcomes if students possess resilience or a robust level of confidence.
- The impact of having low self-efficacy and an external locus of control may exacerbate student behaviours, attitudes and overall outcomes in a non-positive manner.
- Low self-efficacy may result in students demonstrating similar academic behaviours and these behaviours may be perceived as undesirable (such as procrastination, failure to meet deadlines and low attendance). Nevertheless, such undesirable behaviours do not necessarily impact on outcomes.
- Low self-efficacy may have more of an impact on effort as opposed to final outcomes.

- Some students' self-efficacy and confidence is very robust and enduring, despite potential sources of self-efficacy (such as negative teacher feedback or comparison with others) which may act to reduce self-efficacy in other students.
- Existing research that described attitudes and behaviours of students with an internal locus of control highly concurred with the findings of this research, especially in relation to self-esteem, neuroticism and academic outcomes. Despite the perceived theoretical concerns relating to the construct validity, the locus of control did seem to be separate from other variables such as self-efficacy and neuroticism.

These conclusions suggest that some students may not demonstrate behaviours and attitudes that are perceived as desirable, but they still achieve successful outcomes. The type of locus of control and level of self-efficacy did seem to impact on these learners in terms of the behaviours and attitudes they exhibited. Nevertheless, this is a very tentative assertion given that this research was based only on a small number of participants.

6.3.3 Providing feedback

The main conclusions arising from this research regarding feedback are as follows:

- Feedback (other than a grade) seems important in promoting the effectiveness of target setting. However, the type (feedback about task, feedback about process, feedback about self-regulation or feedback about self), whether it is positive or negative and the means by which it is provided (verbal or written) **may** be influenced by a students' self-efficacy or locus of control beliefs.
- Some students actively sought out negative as opposed to positive feedback. Research has suggested that students who have high self-efficacy tend to do this, but this research indicated that it was more a feature of students who had a strong internal locus of control.

These conclusions indicate the importance of feedback in conjunction with a target grade. In isolation, a target grade may not provide enough information regarding how a student actually achieves their target grade as it is more of an indication of the success of a particular task.

Feedback at process and regulation level is seen as particularly important so that students learn how to improve.

6.3.4 Achieving successful outcomes

The main conclusions arising from this research regarding successful outcomes are as follows:

- In some cases, outcomes cannot be predicted.
- Academic behaviours exhibited **may** reflect established research. However, certain academic behaviours that are considered as undesirable, **may not** impact negatively on outcomes if students possess resilience or a robust level of confidence.
- Deprivation did not seem to negatively impact on outcomes in this research. However, it must be acknowledged that both the sample size was small as was the number of deprived participants within the sample size.

Of the total sample of students in this research, only two met the target grades that were assigned to them, so performed as expected. The rest of the students overachieved and underachieved against their targets, and in one case the level of underachievement was significant - (a three grade drop). However, one student significantly overperformed by two grades in all three of her subjects. Students who were categorised as Non-Engagers were marginally more successful than the students categorised as Engagers.

6.4 Implications for policy makers within education institutions

Policy makers create principles in order to guide decisions and achieve rational outcomes, and an institution's target setting policy will have been implemented due to its commitment to the perceived benefits of setting individual targets for students. However, this research has revealed that the setting and monitoring of targets is a highly complex process and students' actual experiences of this process can be very different. Some students clearly benefit, but other students

experience demotivation and a decline in their confidence, commitment and ultimately belief in themselves. The question arises whether this is fundamental flaw in the principles behind target setting policy itself, or the way in which it is implemented, or a combination of both. Tentatively, this research suggests it is most probably the latter which has implications for both policy makers and teachers/tutors who implement, monitor and review targets with students. It also has implications for commercial organisations such as Alps. One of their underlying principles is that setting demanding, but achievable, targets is an aspiration and everyone (students and staff) should be challenged to be aspirational. The process used to develop these targets is claimed as 'objective' and is based on statistical techniques alone. This is promoted in their rhetoric as what makes Alps so effective: *'We believe every student's targets should be based on ability, not their social background, ethnicity or whether they're male or female'*. This then may become a weakness in that students are not being considered as unique individuals with unique strengths, weaknesses and circumstances.

Notwithstanding the previous point, the main issues for policy makers is how to ensure students come up with measurable, challenging but achievable targets that can be realised within a specified time frame. In setting a target there is a requirement that it can be measured, so this implies a quantitative element which is why student targets tend to be grade based. Students will complete formative assessment during an academic year and sit an exam at the end of the year, so this is a straightforward way in which to determine whether the target has been met. Educational establishments use commercial organisations to set each students' targets because this is associated with statistical rigour and ensures that targets are set at a challenging but achievable level. This approach seems logical and is commonplace, but herein lies the issue for policy makers – students then need to take ownership of the target. Taking ownership means that the student takes on responsibility and actually wants to achieve the target they have been set. Target setting literature suggests that negotiation of targets may help to promote ownership, but this may create further issues. If a student negotiates down their target, then the target may not be challenging or motivational; contrastingly, if they negotiate up their target, they may not actually achieve it, which again has emotional and cognitive implications.

This research has revealed that successful outcomes can be achieved where students take ownership of their targets, but it has also shown that this can be a negative experience if students are trying to achieve their target, but are failing to do so. Targets could be negotiated down in such

circumstances but this could further demoralise the student. It is proposed that further research explores factors that may promote or hinder student ownership of targets. At present, policy makers may be implementing a policy that is not working in practice as they intended it to.

6.5 Implications for teachers/tutors

While policy makers should tackle issues related to ownership, teachers and tutors are best placed to provide students with feedback as to whether they are achieving their targets. This feedback is provided in grade format so students can compare the grade they receive to their target grade, but also through verbal and written formats. Nevertheless, this research has demonstrated that feedback, and the effectiveness of such feedback is highly complex. Feedback has both cognitive and emotional consequences and, done effectively, can promote learning and self-belief, but this effectiveness is also dependent on who is receiving the feedback and how it is carried out. This exacerbates its complexity and demonstrates that teachers and tutors need to establish trusting relationships with students so that they understand how to provide the most appropriate feedback. As described in Section 2.12, feedback can be provided at different levels, and these levels can be more or less effective depending on the students' self-efficacy. Furthermore, as seen with the Autonomous Non-Engagers and the Disregarding Non-Engagers, feedback needs to not only engage students, but some students seek specific types of feedback such as negative feedback in order to maximize their learning experience.

The implications for teachers/tutors are significant in terms of the need to provide individualized feedback that recognizes students' self-belief and how best to enhance this, but to also maximize learning. This clearly has time and logistical implications. Nevertheless, it may be more appropriate to provide more mentoring/one to one tutorials as opposed to standard practice which uses ticks, crosses, comment banks and provides a final grade.

6.6 Implications for students

Students also need to recognise their role in the target setting process. Prior to embarking on a programme of study, they should ensure they have carried out appropriate research to confirm they are enrolling onto appropriate courses. This should enhance commitment and motivation levels to succeed, along with matching their ability and skills to courses that utilise such skills. From the outset, Catherine recognised that her ability and skills were far more suited to the languages she was studying as opposed to the two science based courses which were much more numerate. Likewise, Samiha wanted to enter the medical profession, but her ability and skills did not seem to suit the scientific based subjects which also meant she struggled from the outset.

Students also require self-awareness and understanding as to what enhances their confidence and motivation, along with owning targets that they set themselves. Owning targets takes responsibility and commitment, and students need to recognise that attending college is an opportunity as opposed to filling time if they have no clear direction in mind. There is also a tendency for students to be reactive as opposed to proactive in their target setting experiences. Tamara took every opportunity to discuss her progress with her teachers as well as undertaking additional homework, whereas Emrys did not actively seek feedback nor attend to the feedback he was given. Ultimately, this did not result in a negative outcome on this occasion, but if teachers are actively providing feedback about how to improve, it seems detrimental not to act upon that feedback.

In summary, this research has attempted to demonstrate that target setting is complex in that it impacts on individuals differently. Some students actively engage in the process and find it motivating, whilst some are demotivated by being assigned target grades that are lower than they had expected. However, if these demotivated students are able to exceed these lower than expected grades through formative assessment, they then find the process more motivational. The most concerning predicament is if a student is demotivated and then fails to achieve their lower than expected grade through formative assessment. A cycle of discouragement, as described in Section 4.3.2, manifests and may be difficult to get out of. This research has also shown that some students do not engage in the target setting process. They either do not buy in to the process, as they do not expect to achieve a specific grade for every piece of formative assessment, or do not want to judge their progress or success by the achievement of a particular grade that has been

assigned to them. These differing reactions to target grades have significant implications to policy makers, teachers, tutors and students themselves as described above.

6.7 Reflections on the research study

I aimed to engage reflexively with all aspects of the process in order to examine my own responses and how this impacted on my interpretation and ultimately this thesis.

I begin by stating my position in terms of the context for this research, through a brief description of my personal journey in self-belief within the education system and the implications of this. I then consider my engagement with the literature and data collection, methodological reflections and effectiveness of data collection tools and data analysis and conclude with overall strengths and weaknesses of the research.

6.7.1 My self-belief journey

My personal journey of self-belief begins in acknowledging that I am an only child with a very small family. I think this is relevant in that I also did not have any cousins, so I had no family counterparts to compare myself to or be compared to. My parents had left the education system early and were very much of the mindset that as long as I did my best, they would be happy. During secondary school, academically, I also did what was asked of me, but never pushed myself or felt any motivation to work especially hard. I had no ambitions and simply enjoyed the school experience. My progression to the local Further Education College was entirely down to the fact that my best friend had selected this route, and I wanted to remain close to my friend. And, I did not have anything better to do. Again, achieving some fairly good A level results, I spent little time choosing the subject of Economics and an educational establishment to study at for the next three years and simply copied my friend's university choices. This stage of my education was an arduous time as I quickly realized I had little interest in the numeracy skill needed to excel in this subject. Again, at the end of my degree, I had achieved a mediocre result and no idea what I wanted to do, so I ended

up in a fairly serendipitous way exploring what kind of courses were open to me, and I found myself embarking on a PGCE.

However, over the years my confidence grew and I became an effective teacher and manager as demonstrated by a number of internal promotions I achieved. But I still carried with me a disappointment regarding my academic performance and I knew that I could do better which led me to embark on a Psychology degree. At the outset, I knew that I could do well. I believed that I would enjoy the course and that I would be motivated to achieve the highest grades possible.

During this period of my life, I also had the most demands upon me. I was a senior post holder in a further education college, as well as a wife and mother to two babies. Yet, I was determined to achieve a distinction for every module that I studied and I achieved this and eventually gained a first class degree. The difference between this experience compared with my earlier studying was remarkable and has provided the impetus for this thesis. My education journey had begun with little self-belief and motivation and to date, ended with robust feelings of self-belief, high levels of motivation and internally set 'targets' which I monitored myself against on a systematic basis.

Therefore, my perception of my own self-belief and how I consider it to affect my motivation and confidence at the start of my educational journey compared to the present day is very different, and the subsequent reflection and insight I have gathered, I believe, is incredibly useful in moving me forward. To me, self-belief is an essential prerequisite to achieving goals and as educators we need to engender self-belief in our students so systems and processes we use must work for all. This is why this research is so important to me.

6.7.2 Reflexive engagement with the literature

In terms of reflexive engagement in carrying out the literature review, it took me some time to recognize my bias in relation to target setting research. As I made notes in my research journal, I realized I was overly critical of research that reported the benefits of the target setting and I focused on sub sections of articles that then skewed my interpretation of the rest of the article. For example, Martinez's (2001) report 'Great expectations: setting targets for students' stated:

'The best argument for implementing target setting processes is they work' (p2).

I took this as a circular argument and my interpretation of the rest of the report was somewhat disdainful. However, in recognizing my bias through revisiting my research journal, I decided to reread this report. There were some interesting and relevant sections that I had not really noticed and a sentence that has actually shaped my overall findings and resulting implications (see Section 6.4, 6.5 and 6.6), where Martinez stated '*Targets need to be negotiated and agreed with the tutor but owned by the student*'.

Elliot et al.'s (1999) 'Evolving guidelines for the publication of qualitative research studies in psychology and related fields' was an article I read fairly early on in the research process. Again, I made notes of relevant points, particularly those related to good practice in making 'thick descriptions', situating a sample by describing research participants and their life circumstances, bringing interviewee examples of life and grounding in examples. As is often the experience of case study researchers, I had collected a great deal of information and was finding it difficult to determine exactly what data to include and how to present my findings most effectively. I spent considerable time writing, rewriting and organizing my Findings and Discussion section but was still not satisfied. One evening I reread some of my research journal including my notes from Elliot et al.'s article, and it came to me that the best way to present my findings to provide thick descriptions, bring interviewee examples to life and ground these in examples was through participant vignettes of their experiences.

Bandura's sources of self-efficacy also resonated deeply with me. As educators, we consistently provide feedback to students but there is a great deal of variability in this feedback. In thinking about this, I surprised myself in remembering a somewhat painful experience when, aged 13, I handed in a science homework where I had carefully drawn a picture and described what it was. On receiving the homework back, my teacher had scribbled across it extensively in red pen and it made me think about the experience of students who consistently receive negative feedback or fail to meet their target grade. In some subjects within the college there is extensive use of comment banks which clearly do not provide bespoke feedback which is student centric. As mentioned in the Findings section, feedback is often at the task level as opposed to the processing level which some of the participants clearly struggled with. If self-efficacy is to be promoted in students, then it seems that enactive mastery experiences must be targeted to the needs of the student.

6.7.3 Reflexive engagement with the data collection

A challenge that I have been particularly mindful of is ensuring I only draw on information related to this research's data set, apart from by way of establishing a context. Due to my involvement in target setting for many years, I had developed many opinions and assumptions related to target setting and I had to continually reflect on whether my findings and their interpretation were based on research as opposed any preconceived ideas and experiences. For example, I was very familiar with the policy of target setting and how targets should be communicated to students but after listening to students about their experiences I was mindful to ensure that section 4.2 '*The generation and assignment of target grades*' was written from their perspective and not mine.

I spent considerable time thinking about the questionnaires used in phase 1 to select the participants for the subsequent phases. I was concerned with the validity of a questionnaire in categorising participants in relation to constructs, but I reconciled this concern by perceiving this categorisation process as grouping participants who interpreted and responded in a similar way to questions related to beliefs. In analysing the data, I spent a great deal of time in creating themes that captured the content appropriately and it was only once I had identified the two overarching themes – Engagers and Non-Engagers, and the four sub groups – Encouraged Engagers, Discouraged Engagers, Disregarding Non-Engagers and Autonomous Non-Engagers that I then looked at the questionnaire results for each participant and reminded myself of their scores. Even though existing research had identified common traits in students with an internal locus of control, for example, I was still surprised to see that my research has also revealed some similar findings.

I also found myself amazed at the level of self-assurance in some of the participants and had to remind myself to stay focused during the interviews as my own personal interest in Max and Tamara, for example, could have skewed the focus of the interview, leading me to become preoccupied with what factors promoted such robust confidence and self-esteem. I also think that my own lack of self-belief when I was a teenager made me much more attuned to some of the participants who also clearly lacked self-belief and I had to ensure I was not interpreting their experience through my own 'lens' and therefore not listening properly to what they were saying.

6.7.4 Methodological reflections and effectiveness of data collection tools and data analysis

Purposive sampling was seen as effective way in which to explore self-belief and its impact on target setting. The use of the questionnaires was considered the best way to identify participants with high and low self-efficacy, and internal or external loci of control. However, I spent considerable time in reflecting on whether this approach was at odds with the interpretative framework, as using such questionnaires could imply that there is a reality relating to self-efficacy and locus of control that exists independently. This was not the focus; rather, using questionnaires enabled participants to be grouped together based on similar interpretations of that questionnaire. Therefore, the categories described in the Findings and Discussion section such as 'high self-efficacy' and 'external locus of control' are not meant to be perceived as unchangeable objective realities, but relative meaning/interpretation. They are constructs that have been drawn from literature and explored in relation to the student experience of target setting in order to derive deeper understanding from the students' perspectives. Nevertheless, it was illuminating to then observe similarities between these groupings and their approach to target setting and academic behaviours.

The semi-structured interviews were effective as a means to collect data, and all participants were able to respond to the questions and elaborate. The pilot study was seen as very beneficial as it prompted the revision of the initial Interview Schedule where some questions were misunderstood or elicited dichotomous replies of Yes or No. The other method of data collection was documentation analysis, but on reflection this could have been more extensive. When analysing the data, it became apparent that the type of feedback participants received was variable, depending on the subjects they were studying. It would have been useful to have looked at actual formative assessment and the actual content of the feedback as opposed to using the information on the Electronic individual learning plan (Eilp) which just stated the overall grade. For example, was it negative or positive and what level of feedback was being given? This may have helped understand why some participants were not acknowledging their feedback or how it could be impacting their motivation and confidence. It would also have been useful to speak to each participants' teacher in order to explore their understanding of each participants' experience of target setting and compare

this to the participants' perceptions. However, this was beyond the scope and time limitations of the study.

On reflection, a further refinement would have been to provide each participant with a learning journal. This would be a notebook and they would have been asked to write down their thoughts and actions relating to their learning and formative assessment experiences. Participants would be asked if they were willing to share this with the researcher or they would have been encouraged to talk about it during their interview.

6.8 Strengths and limitations of the study

A strength of this research is that it describes the experiences of students involved in the target setting process, an approach that has hitherto not been reported in the research literature. These experiences exemplify that students are very different in the ways in which they both engage and benefit from such a process. Existing target setting research tends to adopt a much more quantitative approach where it provides data to demonstrate that target setting has been successful, or not, but this approach does not explore the psychological processes that may impact on the potential success or failure. In contrast to existing research, this study has demonstrated that, whilst an educational establishment's implementation of a target setting process is very straightforward, the psychological impact is highly complex with students processing target setting information in very different ways. Another perceived strength of this research is that it has made the connection between self-belief and target setting. There has been a plethora of research concerning academic behaviours and the locus of control and self-efficacy, but this research has revealed how self-belief may also influence academic behaviours and outcomes in target setting processes.

Nevertheless, from a practical perspective, whilst this research has provided a rich description of students' experiences and has given rise to a number of conclusions and implications, it has not been possible to make distinct recommendations to improve the experiences for students. This was never the goal of this research but, having described some of the participant's experiences that were not positive, there is a concern that revealing an issue is not necessarily enough. More

research is needed, which may include action research to be able to make recommendations to improve the target setting experience for all students.

Other potential limitations of the research include the small sample size. Originally twelve participants were recruited and interviewed, but one participant had to be withdrawn from the study, due to an incomplete data set (see section 4.1), resulting finally in eleven in total. The decision to recruit only twelve was based on factors relating to epistemological, methodological and practical issues. There are 1400 students at the college, so only selecting twelve participants may not have adequately recognised the diversity within the college or generated sufficient richness of data. Finally, asking participants to complete a questionnaire can unduly constrain them into responding in particular ways, and again this may have impacted on the richness of data generated.

6.9 The influence of the research study on my practice

This research has had a significant impact on my professional practice as it has reminded me that students are unique and the meanings, interpretations and ultimately actions that they create and act on in response to college policy initiatives cannot be assumed to be the same for all. This research has also highlighted self-belief as being important in the learning experience. Policies should ensure they recognise students as individuals, that they offer a degree of flexibility so that the needs of all students are met, and that students are not disadvantaged by a policy that is intended to offer the same benefits to everyone. It has also highlighted the importance of fully explaining procedures in relation to a policy to all stakeholders. Staff should understand why they are being asked to implement a policy, but, in addition, they need full explanations regarding how to do so appropriately. Furthermore, in implementing a policy they also require autonomy and flexibility to implement it in a way that best suits the needs of their individual students, but also fulfils the requirements of the policy. As a policy writer within my institution, this research has been very impactful in terms of my professional practice where I must ensure balance between the purpose and requirements of the policy but at the same time recognising the individual nuances of students and their differing needs.

The importance of feedback was also an area that has emerged as significant following this research. The very nature of providing a target grade, and then asking students to compare the grade that they achieved for a formative assessment with their target grade is purely feedback at task level. This does not support a student in understanding how they can actually improve; thus feedback at processing level and self-regulation level is also required to enable students to develop strategies to improve their learning in conjunction with monitoring their learning so they can ultimately achieve their life goals.

In terms of professional recommendations, the following are suggested:

- Replacing the term 'target' with 'goal' may engender more buy in to a process that is intended to motivate a student to aim to achieve a desired outcome. Whilst a goal needs to be measureable, it can be considered more broadly than a target grade. If the Non-Engagers had been asked to formulate goals, they may have engaged more with the process and seen how the grades they were achieving for their subjects contributed to their overall goal.
- At the start of a programme of study, students will benefit from setting goal(s) related to that programme of study. They need to understand how aspiration can affect motivation and ultimately achievement of the goal.
- It will also be useful to identify the duration of the goal and how a goal can lead to a journey in setting goals in order to arrive at a more longer term destination.
- It is recommended that a goal is not simply assigned to a student. Co-construction of a goal is advocated where a teacher/tutor or mentor can draw on a range of evidence to help formulate a goal. This can help calibrate the level of goal to ensure it is appropriate and aspirational, but not unachievable. Sources such as Alps, prior qualification results, interests, ambitions, and personality/skills audits could be utilised.
- It may be easier to recalibrate a goal than a target. As discussed above, whilst literature recommends that targets should be negotiated, it becomes very demotivating if a student is failing to achieve a specific target and this target is then lowered. For example, if a broader goal was to study Economics at Oxford University, but it was becoming apparent that this was not going to be achievable, a teacher/tutor or mentor could gently, but positively, help influence a change in the goal by reformulating it to enable study of Economics at a Russell Group university. This should still engender a sense of motivation and sight of the bigger picture.

- In current times, mental health is a growing concern amongst young people. A target grade encourages students to measure their value against a very narrow metric, and some students find it unsettling and discouraging to have to compare their target grade to every piece of work they complete. Students often recognise that the variability is not only in their effort and ability, but also in terms of the context in which they undertook the work. This emphasises that students can still achieve their goals even if they do not regularly achieve consistent target grades. This appears to be a more positive approach.
- Regular reviews (between teachers/tutors, mentors, and/or parents and students) of the progress made towards achieving the goal is also required to encourage students not to lose sight of the purpose for which they have embarked on their programme of study. This may also be an opportunity to reformulate or recalibrate the goal.

6.10 Final comments

My favourite day of the academic year is results day in August. Students come into college and head to the sports hall where they are faced with tables arranged around the perimeter of the hall displaying large letters. These tables are manned by staff members and the letters signify the initial of their surnames, so they approach the appropriate table in order to collect their personal envelope containing their results certificate. The excitement and anxiety is palpable as they rip open the envelope and then focus on the somewhat confusing array of grades and marks. Results day June 2019 was particularly special for me as I was able to talk to each of the participants who took part in my research and I was thrilled, if somewhat surprised, with some of outcomes for Max and Fabienne, for example. However, equally it was also very sad talking to Samiha who was devastated with failing one of her subjects. I couldn't help but think that had she had more belief in herself, then perhaps this would not have happened and I reflected deeply on whether the target setting policy had exacerbated as opposed to enhanced her experience.

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Appendices

Appendix 1 – Phase 1 email

Dear student,

I would like to invite you to take part in completing 2 short questionnaires which form part of research which is being undertaken independently of XXXX for an Education Doctorate.

You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Also, information collected will be entirely anonymous.

Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the attached leaflet carefully and ask me if there is anything that is not clear or if you would like more information.

If you would like to contribute to the research, please print off the attached consent and sign/date it. Then hand the consent form into reception. The deadline for handing in the consent form is 1st November 2019. Once the signed and dated consent form is received, you will be emailed the survey links for your completion.

Kind regards.

Appendix 2 – Phase 1 consent form

Doctorate in Education (EdD) Programme – The Open University

Consent form for persons participating in the research project

Research title: THE IMPACT OF SELF BELIEF AND STUDENT BEHAVIOURS ON THE ACHIEVEMENT OF
TARGET GRADES: A SIXTH FORM CASE STUDY

Name of participant:

Name of Researcher: Ruth Jones

1. I consent (agree) to take part in this project. The details of which have been explained to me, and I have been provided with a leaflet in straightforward language to keep.
2. I understand that my participation will involve the completion of two online questionnaires and I agree that the researcher may use the results as described in the leaflet.
3. I accept that:
 - a. the possible effects of taking part in this research have been explained to my satisfaction
 - b. I have been told that I am free to withdraw from the project without explanation or prejudice and to ask for the deletion of any data that have been gathered from me until it is anonymized on **1st April 2019**. After this point data will have been processed and it will not be possible to withdraw any unprocessed data I have provided
 - c. the project is for the purpose of research
 - d. I have been told that the confidentiality of the information I provide will be ensured subject to any legal requirements
 - e. I have been told that with my consent the data generated will be stored securely and will be destroyed after 3 years

- f. If necessary any data from me will be referred to by a **pseudonym (false name)** in any publications arising from the research
- g. On the leaflet and below, I have been given **contact details** for a person whom I can contact if I have any concerns about the way in which this research project is being carried out
- h. I have been told that a summary copy of the research findings will be forwarded to me, should I ask for this.

I wish to receive a copy of the summary project report on research findings. Please circle:

Yes

No

If you circled yes, please supply the email or postal address to which a summary should be sent:

Participant signature:

Date:

Contact details for the Researcher:	Contact details <u>if you have any concerns</u> about the way the research project is being carried out:
Ruth Jones Doctorate in Education (EdD) Programme – The Open University	Judith Lathlean Supervisor - Doctorate in Education (EdD) Programme – The Open University J.Lathlean@soton.ac.uk

This research has been reviewed by, and received a favourable opinion, from the OU Human Research Ethics Committee - **HREC reference number:** **HREC/2754/Jones**
(<http://www.open.ac.uk/research/ethics/>)

Appendix 3 – Phase 1 locus of control questionnaire

Name:		B/C/D number:					
1a	If I set a reasonable goal, I am likely to achieve it with hard work and commitment	Definitely		Probably		Disagree	
1b	There is no point in setting goals; too much can happen that I cannot control	Definitely		Probably		Disagree	
2a	The grades I earned as a student depended more on how much the teacher liked me than how much I studied	Definitely		Probably		Disagree	
2b	My teachers treated me fairly and evaluated my performance objectively	Definitely		Probably		Disagree	
3a	I decide what happens to me; I don't believe in fate	Definitely		Probably		Disagree	
3b	If something is meant to happen, it will, there is little I can do to change that	Definitely		Probably		Disagree	
4a	To become a leader, I believe someone must be in the right place at the right time	Definitely		Probably		Disagree	
4b	I believe that those who wish to be a leader will capitalise on all the opportunities	Definitely		Probably		Disagree	
5a	To be successful in a career takes hard work and effort	Definitely		Probably		Disagree	
5b	Success in my career will depends on who I know, not what I know or do	Definitely		Probably		Disagree	
6a	Whether people like me, or not, is up to them	Definitely		Probably		Disagree	
6b	Using good interpersonal skills can help get people to like me	Definitely		Probably		Disagree	
7a	If I am prepared for an interview, I am more likely to do well	Definitely		Probably		Disagree	
7b	There is no point preparing for an interview as they will ask whatever they want	Definitely		Probably		Disagree	
8a	Normal people cannot do much to change the world, that is for the elite and powerful	Definitely		Probably		Disagree	
8b	One person can make a difference and make an impact on government policy and decisions	Definitely		Probably		Disagree	
9a	Luck does not play a large role in getting what I want out of life	Definitely		Probably		Disagree	
9b	Life is a game of chance; what I get or what happens to me is mostly due to fate	Definitely		Probably		Disagree	
10a	Disappointments in my life come from back luck	Definitely		Probably		Disagree	
10b	Disappointments in my life are the result of the decisions I make	Definitely		Probably		Disagree	
11a	How I treat people determines how they treat me	Definitely		Probably		Disagree	
11b	People will either treat me well or not; no matter what I do	Definitely		Probably		Disagree	


12a	I often feel that I have little control over my life and what happens to me	Definitely		Probably		Disagree	
12b	Luck or chance does not play a large role in determining what happens to me in my life	Definitely		Probably		Disagree	
13a	My rewards are directly related to what I accomplish	Definitely		Probably		Disagree	
13b	Despite hard work and effort, what I accomplish will likely go unnoticed	Definitely		Probably		Disagree	
14a	No matter how much people get involved, war and political unrest will still happen	Definitely		Probably		Disagree	
14b	Political unrest and war can often happen where people don't get involved or assert their political rights and views	Definitely		Probably		Disagree	
15a	The things that happen in peoples' lives are of their own doing	Definitely		Probably		Disagree	
15b	Things just happen to people; they have little control over their fate	Definitely		Probably		Disagree	

Scoring:

For the following questions, tally up how many times you circled Definitely, Probably and Disagree

		Definitely	Probably	Disagree
A	1a, 3a, 5a, 7a, 9a, 11a, 13a, 15a Internal			
B	2b, 4b, 6b, 8b, 10b, 12b, 14b Internal			
	TOTALS (A+B)			
C	1b, 3b, 5b, 7b, 9b, 11b, 13b, 15b External			
D	2a, 4a, 6a, 8a, 10a, 12a, 14a External			

Appendix 4 – Phase 1 self-efficacy questionnaire

B/C/D number:						
		<div style="display: flex; justify-content: space-between;"> Not very like me Very like me </div> <div style="text-align: center; margin: 10px 0;">  </div>				
		1	2	3	4	5
1	I will learn everything that is being taught in my classes this year					
2	I can figure out anything if I try hard enough					
3	If I practiced every day, I could develop just about any skill					
4	Once I've decided to achieve something that is important to me, I keep trying to achieve it, even if it is harder than I thought					
5	I am confident that I will achieve the goals I set for myself					
6	When I am struggling to achieve something difficult, I focus on my progress instead of feeling discouraged					
7	I will succeed in whatever career path I choose					
8	I will be successful in whatever university (if relevant) I choose					
9	I believe hard work pays off					
10	My ability grows with the more effort I put in					
11	I believe that the brain can be developed like a muscle					
12	I think that no matter who you are, you can significantly change your level of talent in something					
Add up your scores to come up with an overall TOTAL:						

Appendix 5 – Phase 1 information leaflet

Our responsibilities to you

♦ We will guard your privacy.

Your participation will be treated in strict confidence in accordance with the Data Protection Act. Your contribution will be used for research purposes only. Individuals will not be identified in the final report.

♦ We will respect your wishes.

Participation in the study is voluntary. If you do not want to take part, just let the researcher know when they contact you.

♦ We will answer your questions.

We will be happy to answer any questions you may have about the research.

Contact information

Ruth Jones

Please email R. Jones who is undertaking the research if you have any further questions.

Supervisor: Judith Lathean

J.Lathean@soton.ac.uk

Please contact the supervisor of this research if you have any concerns about how this research project is being carried out.

Motivation and target grades

This leaflet provides you with further information about some research being undertaken in the college



What is this research about?

In the field of personality research, a **locus of control** was a term developed originally by a psychologist called Julian B. Rotter in 1954.

A locus of control measures the degree to which **people believe that they have control over the outcome of events in their lives, as opposed to external forces beyond their control.**

People can be categorised as having either an **internal** or an **external** locus of control. A person with an *internal locus of control* believes that he or she can influence events and their outcomes, while someone with an *external locus of control* believes outside forces are responsible to what happens in their lives. This can then be linked to how motivated you are in certain areas of your life.

We would like to find out whether you have an internal or external locus of control.

There is no right or wrong / preferred or less preferred answer. It is simply an aspect of your personality.

What is this research about? (cont.)

We would also like to find out about your levels of **self-efficacy**. This simply refers to one's self belief in terms of the chances of successfully completing a task.

Again, this can be linked to motivation as people with a higher level of self-efficacy may be more motivated in certain areas of their life.

After completing these questionnaires, 12 participants will be invited to undertake a series of interviews to find out their opinions about how you stay motivated to achieve your target grades

Do I have to take part?

No. We are relying on your voluntary cooperation. **No one will take part in this study who does not want to. Choosing not to take part in this research will not affect you in any way.**

Even if you say yes to begin with, you are free to withdraw at up time up to 1st January 2019 by emailing XXXXX to say you no longer wish to take part.

What will happen to the information I give?

The information that you give will be drawn together with what other people tell us in a report. Any personal information given will be **confidential** to the research team.

Anonymity will be maintained within the report so **individuals are not identifiable**. If you would like, we can send you a copy of the final report.

So, exactly what is involved?

You will be asked to complete 2 short electronic based questionnaires.

Completion of these surveys will take **no longer than 5 minutes**.

Some participants will then be asked to take part in a series of interviews which will take place in times that suit you.

Appendix 6 – Phase 2 email

Dear student,

I would like to invite you to participate in an interview which forms part of research which is being undertaken independently of XXXXXXXX for an Education Doctorate. **You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Also, information collected will be entirely anonymous.**

Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the attached leaflet carefully and ask me if there is anything that is not clear or if you would like more information.

If you would like to contribute to the research, please print off the attached consent and sign/date it. Then hand the consent form into reception. The deadline for handing in the consent form is 31st January 2019.

Kind regards.

Appendix 7– Phase 2 information leaflet

Our responsibilities to you

- ♦ **We will guard your privacy.**

Your participation will be treated in strict confidence in accordance with the Data Protection Act. Your contribution will be used for research purposes only. Individuals will not be identified in the final report.

- ♦ **We will respect your wishes.**

Participation in the study is voluntary. If you do not want to take part, just let the researcher know when they contact you.

- ♦ **We will answer your questions.**

We will be happy to answer any questions you may have about the research.

Contact information

Principal Investigator: Ruth Jones

Telephone number: XXX

Supervisor: Judith Lathlean

J.Lathlean@soton.ac.uk

Please contact the supervisor of this research if you have any concerns about how this research project is being carried out.



What are your views on target setting?

This leaflet provides you with further information about the study



What is this research about?

Target setting is a process that is used at St David's intended to help you achieve your potential.

This research is about how useful it is in helping you achieve your goals and what can help it work better.

What is involved?

We are asking if you would be willing to take part in an interview. It will be **audio taped** and will take place in **M5** during your free lessons.

We also would like to look at your **grip** to see how well you are progressing towards achieving your target grades and final grades.

What will I be asked about during the interview?

You will be asked about the following broad topics:

- ♦ **What your targets are**
- ♦ **Your experiences related to taking part in the target setting process**
- ♦ **Your opinions related to the target setting process**
- ♦ **Whether the process of target setting is helping you achieve your predicted grades**

Do I have to take part?

No. We are relying on your voluntary cooperation. **No one is taking part in this study who does not want to.**

Even if you say yes to begin with, you are **free to withdraw** at any time by simply emailing the link below to say you no longer wish to take part :

XXX

What will happen to the information I give?

The information that you give will be drawn together with what other students tell us in a report. Any personal information given will be **confidential** to the research team.

Anonymity will be maintained within the report so **individuals are not identifiable**. If you would like, we can send you a copy of the final report.

What happens now?

We will contact you again soon to ask for your **consent** to part in the research and to arrange an appointment to meet with you.

In the meantime, if you have any queries at all about the study, please email **Ms Jones** using the email address below:

XXX

Appendix 8 – Phase 2 consent form

Doctorate in Education (EdD) Programme – The Open University

Consent form for persons participating in the research project

Research title: THE IMPACT OF SELF BELIEF AND STUDENT BEHAVIOURS ON THE ACHIEVEMENT OF
TARGET GRADES: A SIXTH FORM CASE STUDY

Name of participant:

Name of Principal Investigator: Ruth Jones

1. I **consent (agree)** to take part in this project. The details of which have been explained to me, and I have been provided with a **leaflet** in straightforward language to keep.
2. I understand that my participation will involve **interviews** and **reporting on information on my Eilp** and I agree that the researcher may use the results as described in the leaflet.
3. I accept that:
 - a. the possible effects of taking part in this research have been **explained** to my satisfaction
 - b. I have been told that I am **free to withdraw** from the project without explanation or prejudice and to ask for the deletion of any data that have been gathered from me until it is anonymized at the point of transcription on **1st April 2019**. After this point data will have been processed and it will not be possible to withdraw any unprocessed data I have provided
 - c. the project is for the purpose of research
 - d. I have been told that the **confidentiality** of the information I provide will be ensured subject to any legal requirements

- e. I have been informed that with my consent the data generated will be stored **securely** and will be destroyed after 4 years
- f. If necessary any data from me will be referred to by a **pseudonym (false name)** in any publications arising from the research
- g. On the leaflet and below, I have been given **contact details** for a person whom I can contact if I have any concerns about the way in which this research project is being carried out
- h. I have been informed that a summary copy of the research findings will be forwarded to me, should I request this.
- i. I **consent (agree)** to these interviews being audio-taped.

I wish to receive a copy of the summary project report on research findings. Please circle:
 Yes No

If you circled yes, please supply the email or postal address to which a summary should be sent:

Participant signature:

Date:

Contact details for the Principal Investigator (PI)	Contact details <u>if you have any concerns</u> about the way the research project is being carried out:
Ruth Jones Doctorate in Education (EdD) Programme – The Open University	Judith Lathlean Supervisor - Doctorate in Education (EdD) Programme – The Open University J.Lathlean@soton.ac.uk

This research has been reviewed by, and received a favourable opinion, from the OU Human Research Ethics Committee - **HREC reference number: HREC/2754/Jones**
[\(http://www.open.ac.uk/research/ethics/\)](http://www.open.ac.uk/research/ethics/)

Appendix 9 – Phase 2 Interview Schedule

1. Do you know what your target grades are?
2. Do you know how they have been calculated?
3. How do you feel about being given a target grade?
4. What impact will it have on your learning?
5. To what extent do you feel that the grades you got for your GCSEs reflect your ability?
6. What kind of things do you think influenced the grades you got for your GCSEs
7. Did you feel confident that you would achieve the grades you did?
8. If someone asked you what your self-belief was, what would say?
9. Do you think having a target grade for each subject will motivate you?
10. How do you think you will feel if you achieve a grade higher than your target grade on a piece of work?
11. How do you think you will feel if you achieve a grade higher than your target grade on a piece of work?
12. Do you look forward to getting feedback on your work? Can you expand?
13. Do you compare your grades to others? How do you feel?
14. Do you think your mental state affects your studentship?
15. How do you think you are going to use target grades in your studying?
16. Do you think that you can improve your ability level or that everyone reaches a peak that they can't exceed?
17. Do you think you yourself are responsible for hitting your target grades or are there other factors that might affect this?
18. How confident do you feel in hitting your target grades?
19. What kind of things are contributing to the confidence you feel?
20. Would you describe yourself as motivated?

